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The ARCHITECTURAL RECORD May 1915

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CANTON, OHIO



THE ARCHITECTURAL RECORD

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STAIR HALL—RESIDENCE OF E. I. CUDAHY,
ESQ., CHICAGO. OTIS & CLARK, ARCHITECTS.

THE ARCHITECTURAL RECORD

MAY, 1915

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NUMBER V



EXAMPLES OF THE WORK OF OTIS & CLARK *By* HERBERT CROLY

A WELL known English critic recently drew an interesting comparison between the general characteristics of the English literary movement of to-day and that of the Victorian period. The comparison turned chiefly on the absence of literary men of exceptional ability in contemporary England, but the presence of a very high average of men of ability both in respect to prose and verse. England has no novelists or poets comparable to the great Victorians, but she has an extraordinarily large number of writers who are abler than any except the ablest of the Victorians, and who maintain a high standard both in form and substance. Genius is lacking, but talent abounds.

The foregoing generalization applies, it would seem, to other occupations besides letters and to other countries besides England; England has no statesmen or orators who tower above their

contemporaries as did Gladstone, Disraeli and John Bright. She has no scientists whose eminence is comparable to that of Huxley and Tyndall. At the same time there is certainly a larger amount of hard, sound work accomplished at the present time both in politics and in science than there was a generation ago. Germany also seems to lack both politicians and generals who measured up to the standard of the founders of the Empire, but the lack of very great men does not prevent her from putting into action what is apparently the most efficient machine for fighting a war and for ameliorating its unfortunate effects on her own population which the world has ever seen.

These analogues are worth some attention, because something of the same movement seems to be taking place in American architecture. The modern architectural revival in this country has

been profoundly influenced by the work of a few men such as Hunt, Richardson, McKim, White and Sullivan. At the present time all but one of these men are dead and he no longer possesses his former influence. New designers have been developed of equal ability, but they do not stand out among their contemporaries as did the men named above, and they are not copied to the same extent. The place of Richardson and McKim has been taken by a small army of younger architects of varying ability but of generally high standard. All over the country an extraordinary amount of clever, well considered and interesting work is being turned out. This work frequently possesses a great deal of distinction; but it has the distinction not of originality or of force, but of ease, competence and good manners.

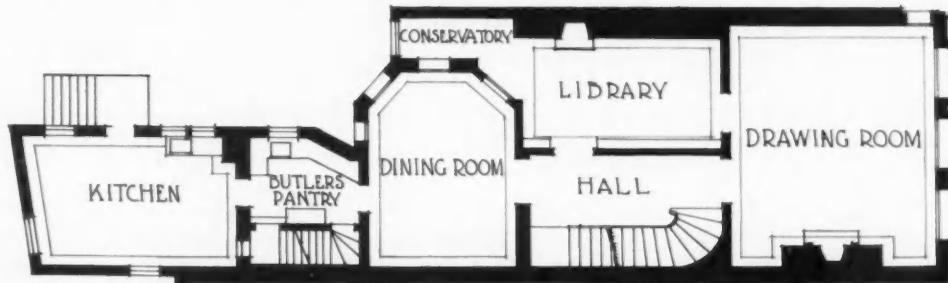
Work such as that of Messrs. Otis and Clark suggest the foregoing introductory remarks. It is sound and intelligent work, which is well-informed without a trace of pedantry, and which conforms to conventions without being stiff. It makes no pretense to originality, but its want of originality does not prevent it from being fresh and even lively in appearance. One feels that the architects are at home in their work, that they are getting through it without effort and on the whole without very much friction. Twenty years ago the ability to design such houses as these, particularly in the vicinity of Chicago, would have required a large amount of originality, effort and prestige. However much American architecture may lack men of great individual force, it certainly provides increas-

ing opportunities for the achievement of diversified, agreeable and accomplished work.

A very simple and attractive design is that of the Indian Hill Club, at Winnetka, Ill. It consists essentially of a long, low one and one-half story building with a peaked roof, resembling an enlarged New England farmhouse; but this long building has two wings of the same height, and the space between the wings is enclosed and made a one-story hall. It remains as unpretentious as a New England farmhouse and it has the same sort of charm. If a New England farmer could have become affluent without acquiring social presumption, he would have built for himself this kind of a residence. It does not even make the comparatively modern claims of a manor house. It belongs essentially to a man who farms his own land, who cultivates his own garden, and that is the kind of man which an American ought to be.

The members of the Indian Hill Club are to be congratulated upon having a home which has been kept so completely domesticated.

An interesting variation on the same general type is the residence of Mr. Chas. M. Rankin at Terre Haute, Ind. This house consists of a two-story and attic main building. On the entrance side this main building is supplemented by an extension, containing the kitchen, the servants' rooms and the garage. This extension joins the body of the house at an angle, and the plan has enabled the architects to make a very pleasant arrangement for the approach to the build-

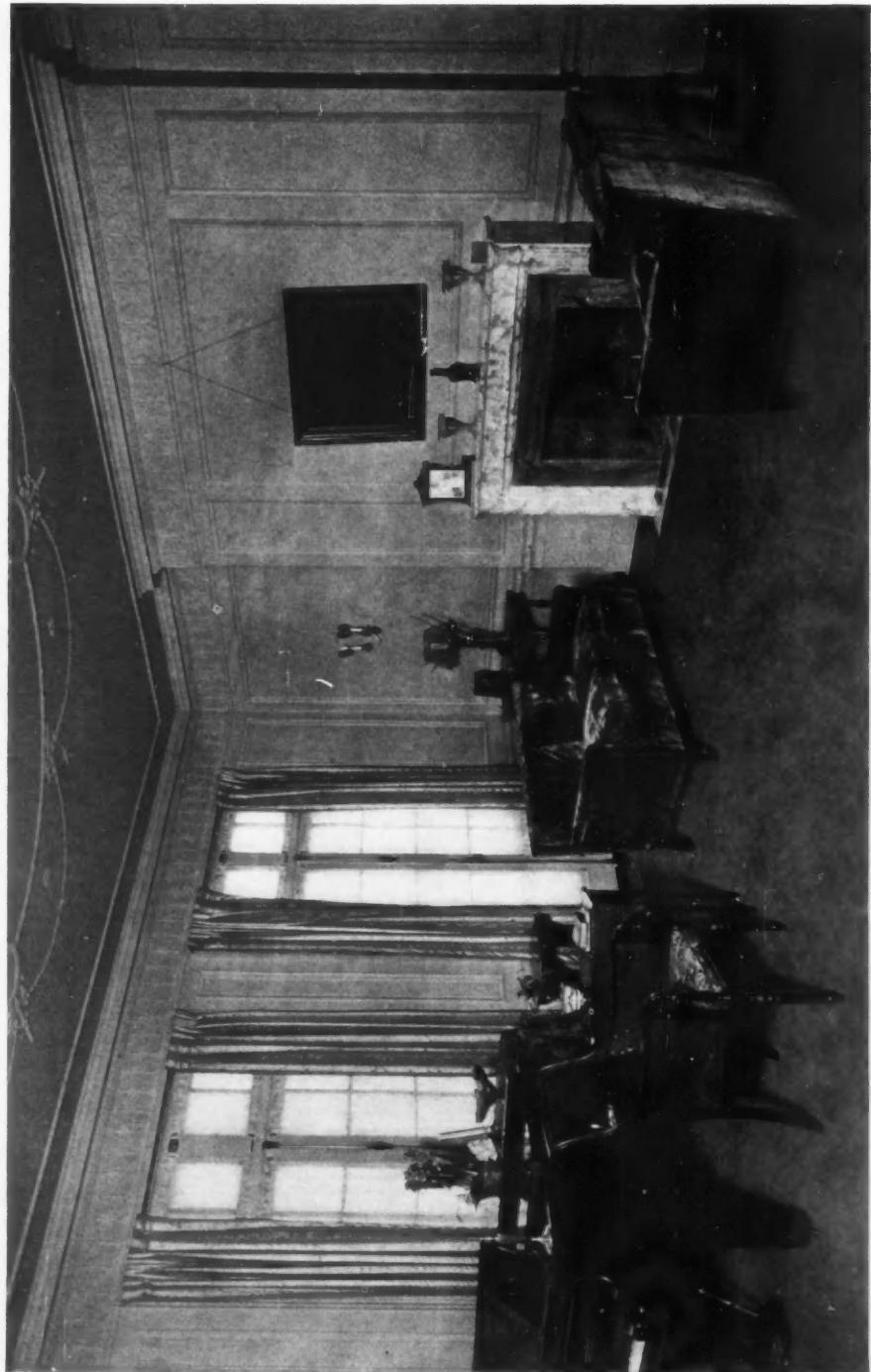


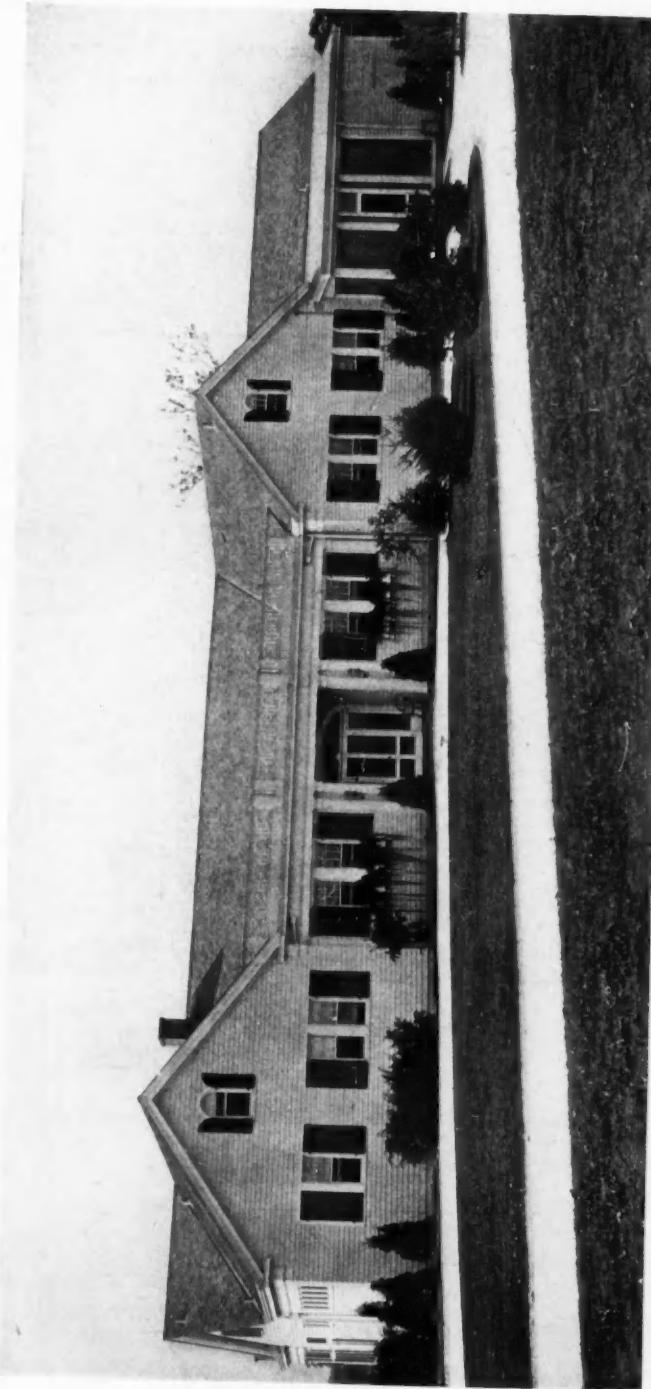
FIRST FLOOR PLAN—RESIDENCE OF E. I. CUDAHY, ESQ., CHICAGO.
Otis & Clark, Architects.



RESIDENCE OF E. I. CUDAHY, ESQ.
CHICAGO. OTIS & CLARK, ARCHITECTS.

DRAWING ROOM—RESIDENCE OF
E. L. CUDAHY, ESO., CHICAGO,
OTIS & CLARK, ARCHITECTS.

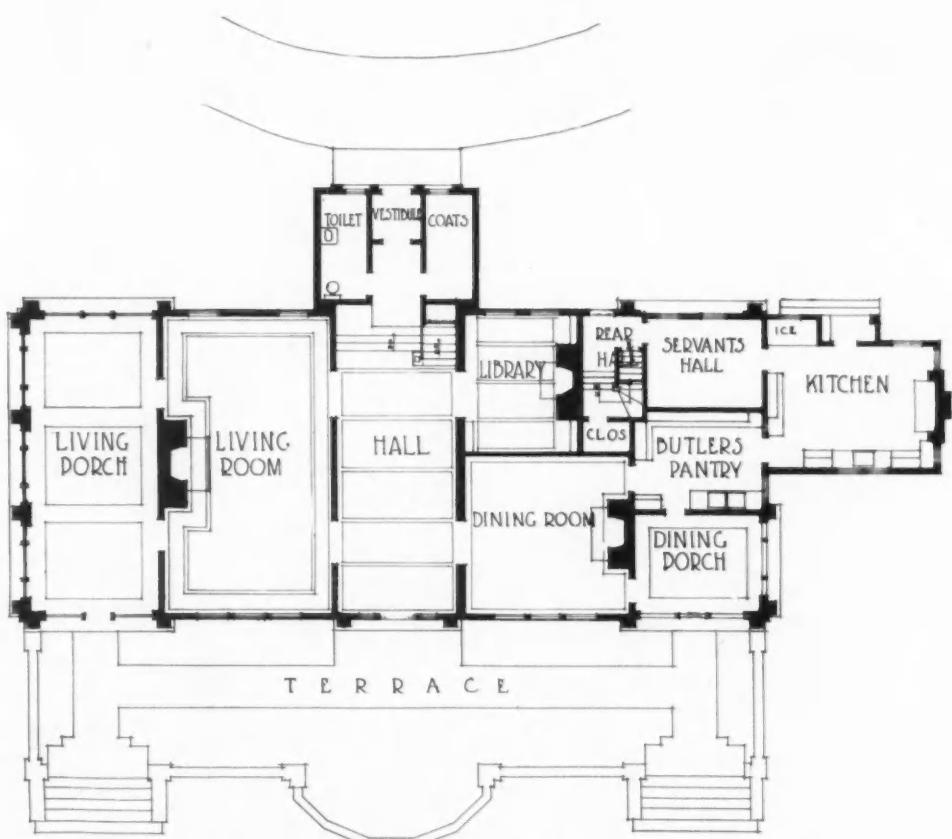




INDIAN HILL CLUB, WINNETKA,
ILL. OTIS & CLARK, ARCHITECTS.



FIRST FLOOR PLAN—INDIAN HILL CLUB, WINNETKA, ILL.
Otis & Clark, Architects.



FIRST FLOOR PLAN—RESIDENCE OF F. H. SCOTT, ESQ., HUBBARD WOODS, ILL.
Otis & Clark, Architects.



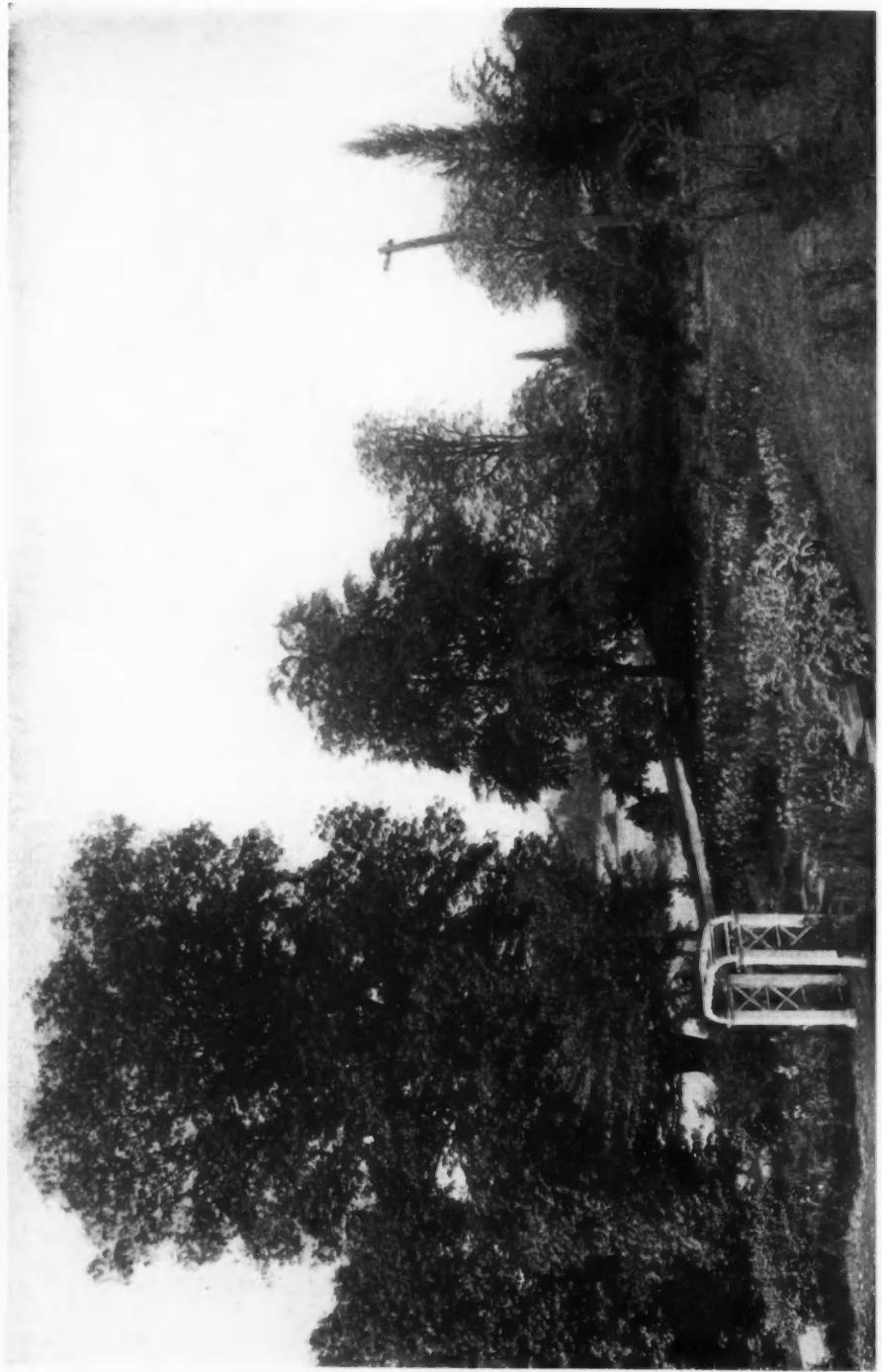
TERRACE OVERLOOKING LAKE MICHIGAN—RESIDENCE OF FREDERICK H. SCOTT, ESQ.,
AT HUBBARD WOODS, ILLINOIS.
Otis & Clark, Architects.

ing. The arrangement is unconventional and effectual, while at the same time being compact and convenient. Although the architectural style is not picturesque, the effect of the design of the entrance side is sufficiently irregular to have an element of the picturesque in it, to which the low, one-story garage, whose roof runs into that of the extension, contributes very much. The practice of incorporating the garage with the design of the house is becoming more and more popular, particularly in the case of modest suburban places. There is no real need of removing it to a distance, as was the case with a stable.

On the garden side of the Rankin place the corner and garage extension almost completely disappear from view. From this aspect the dwelling looks like an unusually large two-story farmhouse seated on a terrace and provided with all the modern conveniences. It is above all a comfortable and homely kind of building, but with a homeliness that is not devoid of refinement and good taste. Whatever else may be said for American ar-

chitecture, it is certainly creating a more appropriate and interesting type of house for middle class people than is the architecture of any foreign country.

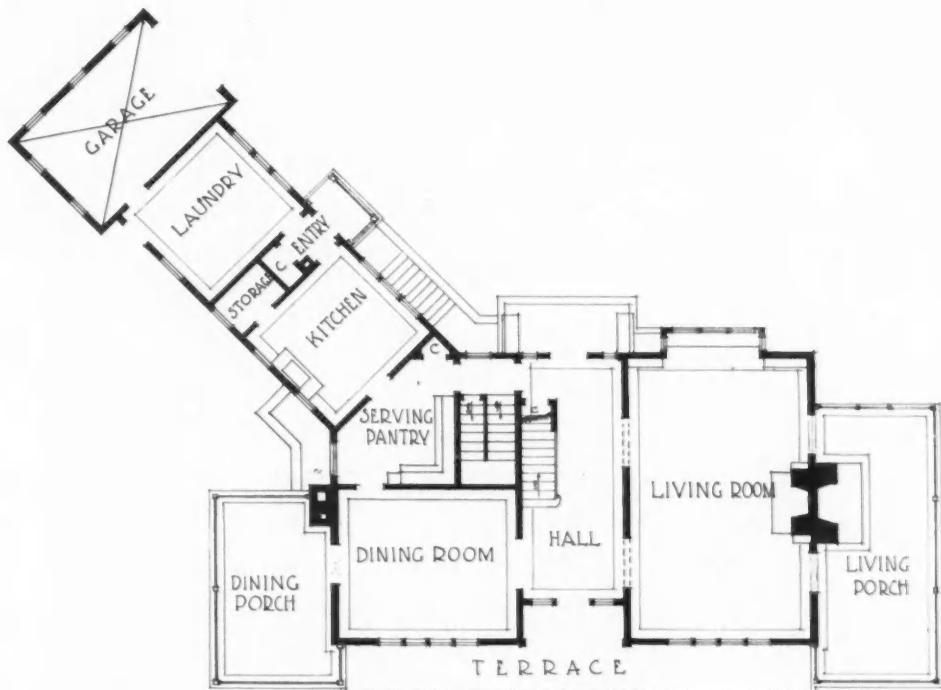
The most elaborate house designed by Messrs. Otis and Clark is the Thorne place, situated at Lake Forest, Ill. A residence of this kind is intended for comparatively wealthy rather than for moderately well-to-do people, and its design is, consequently, more largely determined by the historical dwelling occupied by similarly fortunate people of other times and countries. This particular dwelling is a discreet and tasteful adaptation of a French chateau to the needs of a contemporary American family. The entrance facade is particularly successful and may partly be characterized as one of the most sympathetic and reticent attempts which has been made in this country to domesticate in the United States this particular style. It is regular and formal without being stiff, and it is handsome and stylish without being ornate and ostentatious; above all, the architects have succeeded in



GARDEN—RESIDENCE OF CHARLES
M. RANKIN, ESQ., TERRE HAUTE,
IND. OTIS & CLARK, ARCHITECTS.

RESIDENCE OF CHARLES M. RAN-
KIN, ESQ., TERRE HAUTE, IND.
OTIS & CLARK, ARCHITECTS.





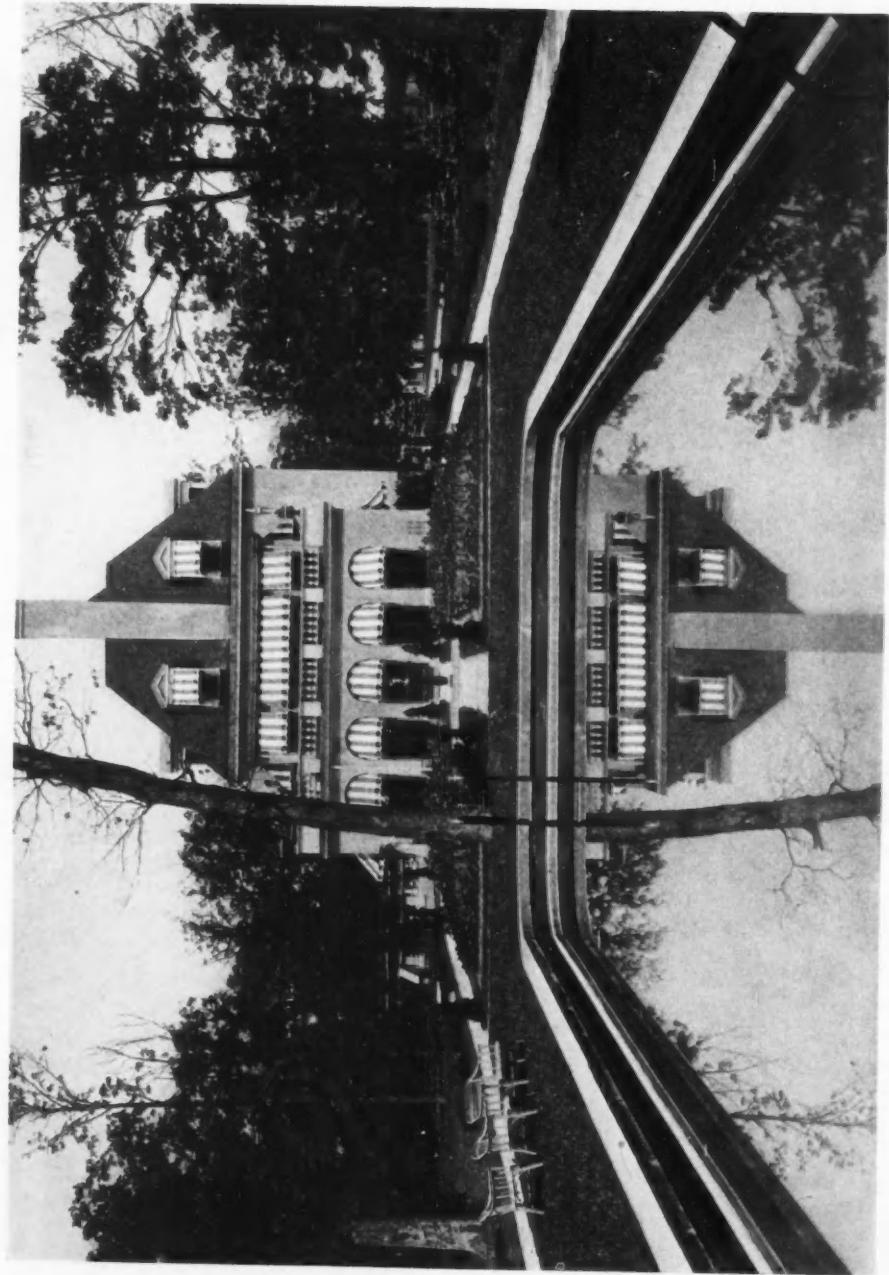
FIRST FLOOR PLAN—RESIDENCE OF CHARLES M. RANKIN, ESQ., TERRE HAUTE, IND.
Otis & Clark, Architects.



RESIDENCE OF CHARLES M. RANKIN, ESQ., TERRE HAUTE, IND.
Otis & Clark, Architects.

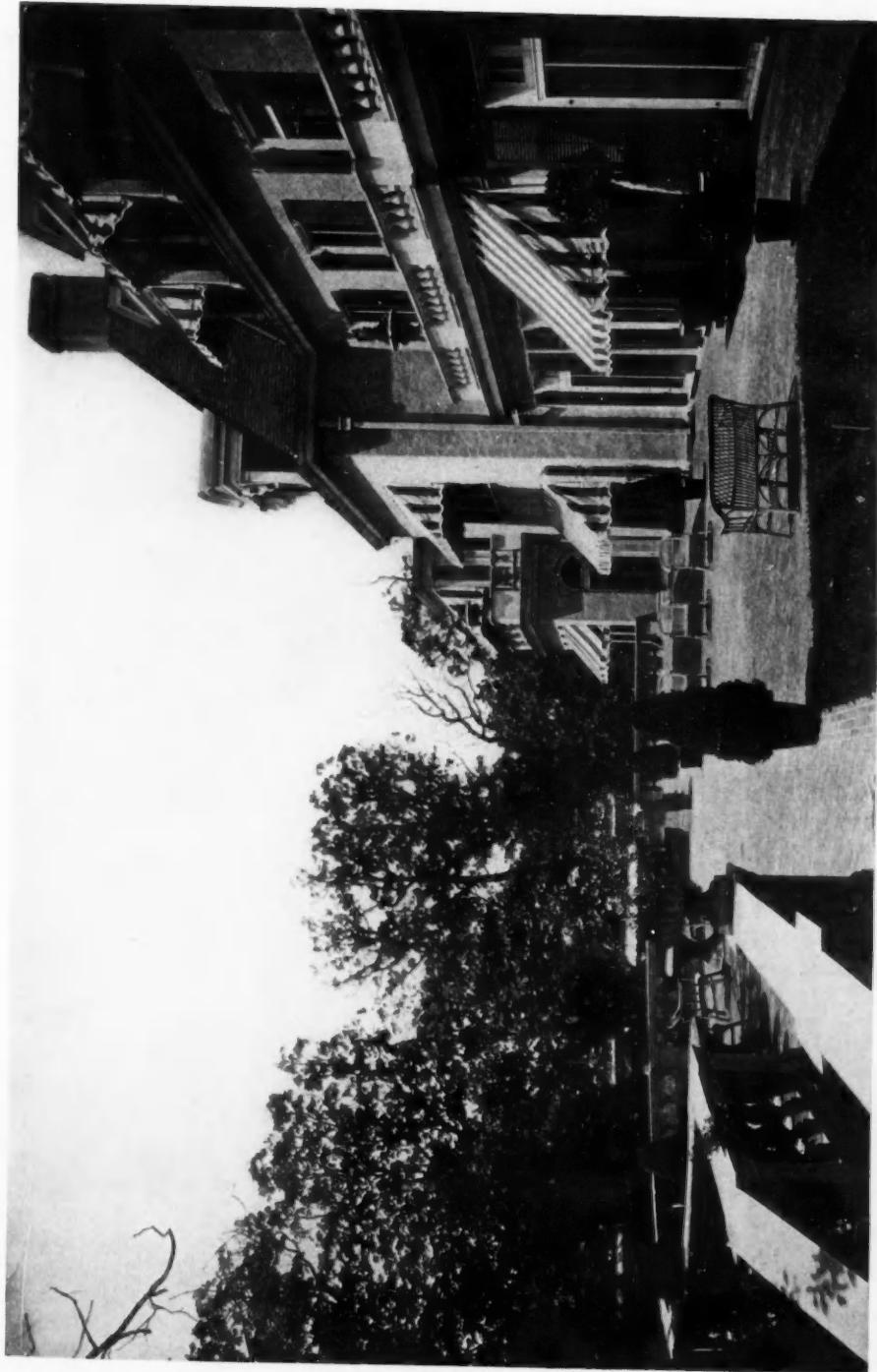


RESIDENCE OF JAMES W. THORNE, ESQ., LAKE
FOREST, ILL. OTIS & CLARK, ARCHITECTS.



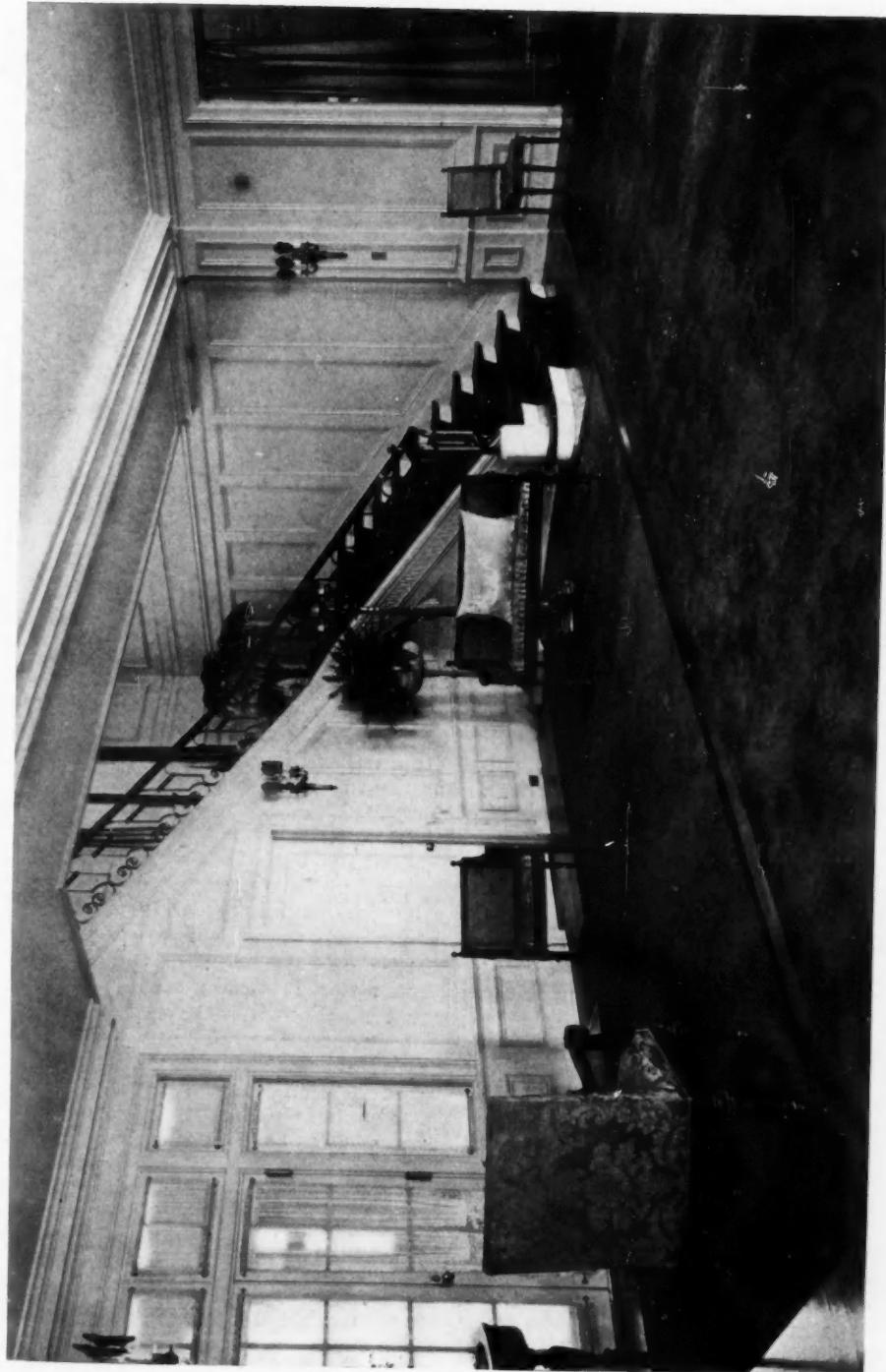
RESIDENCE OF JAMES W. THORNE, ESO., LAKE
FOREST, ILL. OTIS & CLARK, ARCHITECTS.

TERRACE—RESIDENCE OF JAMES
W. THORNE, ESQ., LAKE FOREST,
ILL. OTIS & CLARK, ARCHITECTS.





GARDEN AND BATH HOUSE—RESIDENCE OF
JAMES W. THORNE, ESO, LAKE FOREST,
ILL. OTIS & CLARK, ARCHITECTS.



HALL—RESIDENCE OF JAMES W.
THORNE, ESO., LAKE FOREST,
ILL. OTIS & CLARK, ARCHITECTS.



DINING ROOM—RESIDENCE OF JAMES W. THORNE, ESQ., LAKE FOREST, ILL.
Otis & Clark, Architects.

avoiding the archaic appearance which has been one of the most objectionable aspects of so many American chateaus. For all its conformity to a particular style, it looks like a modern American residence, though it would be difficult to say just how the architects have succeeded in giving this modern accent to the language of another century. The one blemish in the design of this entrance facade is the second story windows in the extension. They are on the same level as the windows in the main building, but, inasmuch as the ceilings are lower, they have been allowed to break through the line of the roof in an extremely objectionable way.

The other facade of the Thorne house, is supplemented by a handsome terrace, which forms the scenic background for what is in reality a private outdoor living room. This facade is less interesting than the entrance frontage. The architects were obliged to choose between remaining true to the type or of adapting the historic model radically and frankly to modern American needs. They quite prop-

erly chose the latter course. Their adaptation amounts in this case almost to a transformation. They sacrificed the style to the needs and wishes of the people who were to live in the building. The terrace frontage has little of the simplicity and the distinction of its more public brother. It gives one the impression of being chiefly windows and awnings, and of course it looks better on days when the awnings can be rolled up. It remains true, none the less, that the French chateau style needs for its proper effect high unpierced wall space and high repose. The terrace facade has been designed to meet a real need for sunlight and other modern conveniences, but like so many modern contrivances, it is restless just because it is useful, and it lacks character. Neither does the smaller frontage look very well from the garden, which has been laid out to the west of the house in an attractive background of trees. Here again appearance has been somewhat sacrificed to convenience. The spacious porch, which leads to the garden, is excellent in itself, but it was difficult to place



FIRST FLOOR PLAN—RESIDENCE OF JAMES W. THORNE, ESQ., LAKE FOREST, ILL.
Otis & Clark, Architects.



FIRST FLOOR PLAN—RESIDENCE OF WILLIAM S. MASON, ESQ., EVANSTON, ILL.
Otis & Clark, Architects.



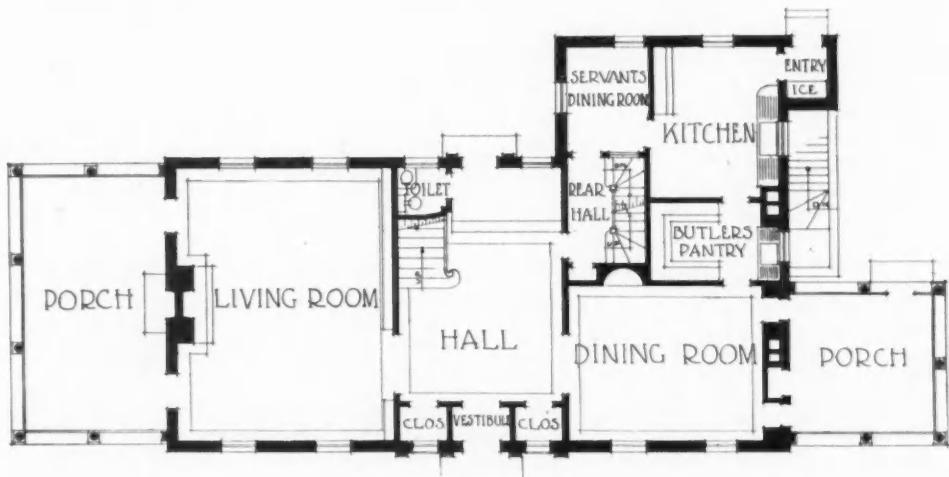
ENTRANCE—RESIDENCE OF WILLIAM S. MASON, ESQ., EVANSTON,
ILL. OTIS & CLARK, ARCHITECTS.



RESIDENCE OF WILLIAM S. MASON, ESQ., EVANSTON, ILL.
Otis & Clark, Architects.



DINING ROOM—RESIDENCE OF WILLIAM S. MASON, ESQ., EVANSTON, ILL.
Otis & Clark, Architects.



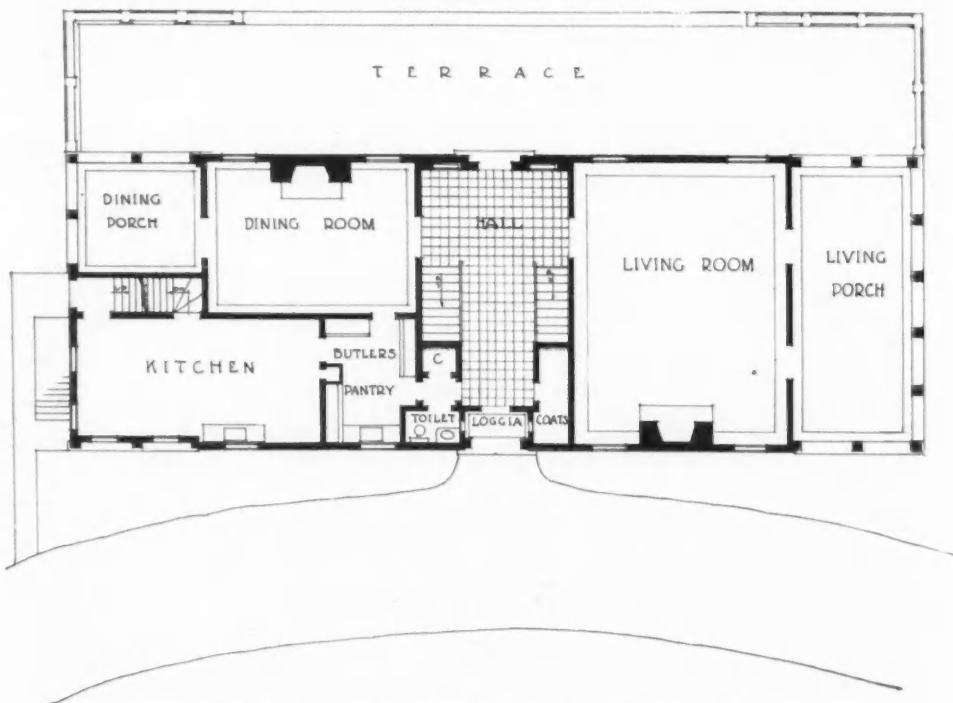
VIEW AND FIRST FLOOR PLAN—RESIDENCE
OF JAMES FENTRESS, ESQ., HUBBARD WOODS,
ILL. OTIS & CLARK, ARCHITECTS.

TERRACE—RESIDENCE OF WALTER R. KIRK, ESQ., LAKE FOREST,
ILL. OTIS & CLARK, ARCHITECTS.

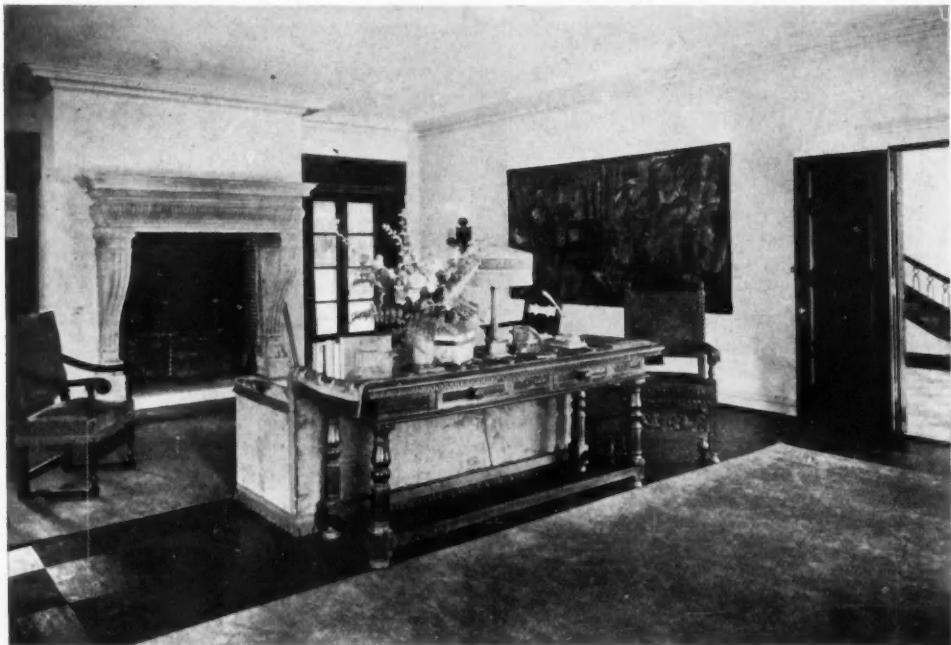




RESIDENCE OF WALTER R. KIRK, ESQ., LAKE FOREST, ILL.
Otis & Clark, Architects.



FIRST FLOOR PLAN—RESIDENCE OF WALTER R. KIRK, ESQ., LAKE FOREST, ILL.
Otis & Clark, Architects.



LIVING ROOM—RESIDENCE OF WALTER R. KIRK, ESQ., LAKE FOREST, ILL.
Otis & Clark, Architects.



DINING ROOM—RESIDENCE OF WALTER R. KIRK, ESQ., LAKE FOREST, ILL.
Otis & Clark, Architects.

RESIDENCE OF JOHN A. JAMESON,
ESQ., HUBBARD WOODS, ILL.
OTIS & CLARK, ARCHITECTS.



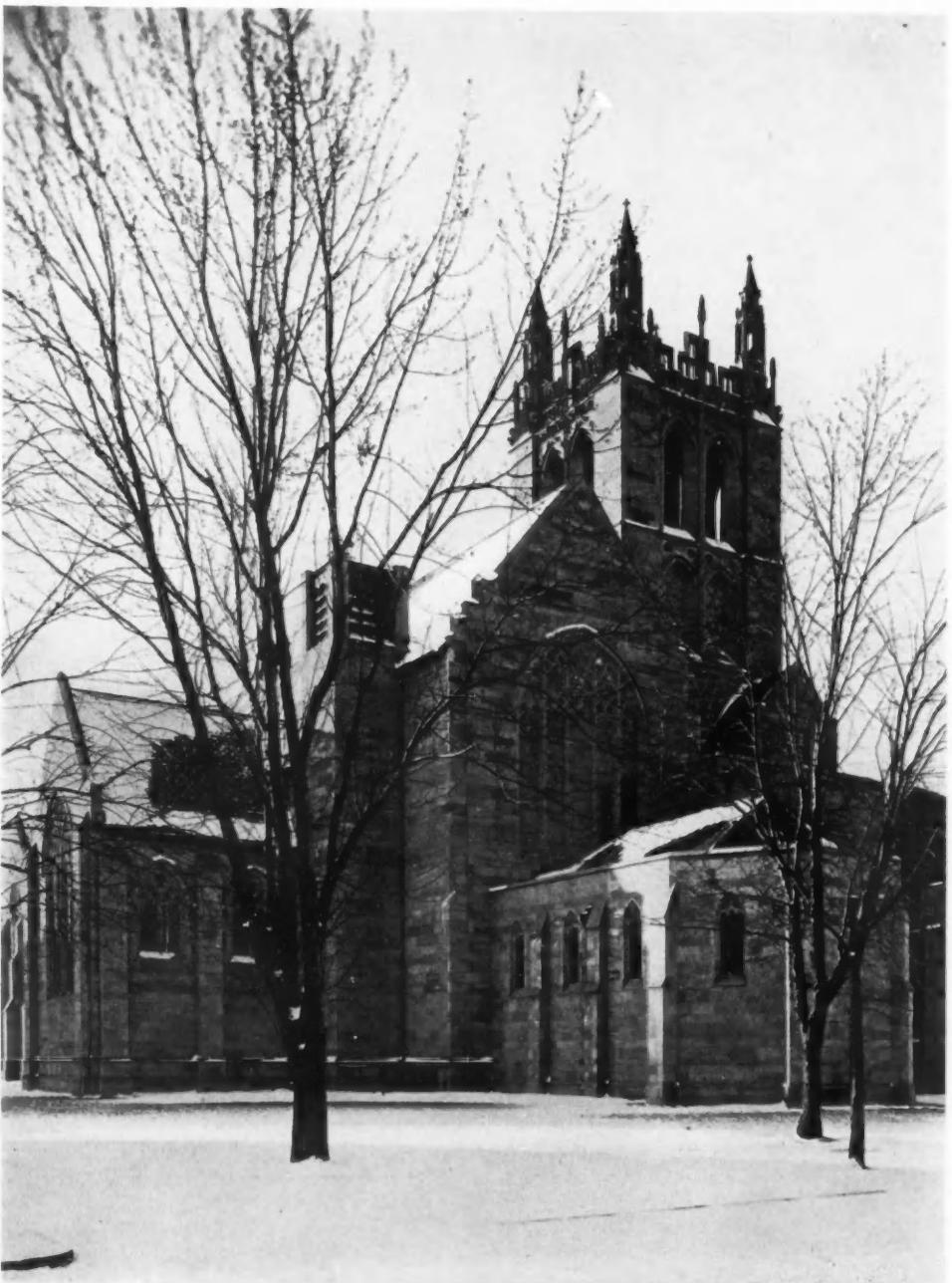
against the background of the body of the house and make it look well. A great deal of careful and successful study has been devoted to the interior of this house. The entrance hall and the dining room are particularly good examples of the simpler type of French panelled room.

Another of Messrs. Otis and Clark's dwellings which belongs emphatically to an historic type is the home of Walter R. Kirk, at Lake Forest, Ill. This house is, of course, scrupulously and even somewhat consciously Spanish in its appearance. Its Spanish character is unfortunately attenuated by the multiplicity of its windows, which has prevented the architects from obtaining the unbroken stretches of wall surface which added so much to the severe dignity of Spanish domestic architecture. But it is none the less a very interesting example of the application of Spanish forms to the needs of a modern American family. Spanish buildings usually managed to combine picturesqueness with great simplicity in the composition of a building and in the massing of its parts. The Kirk house also is low; simple as the elements of its composition and almost devoid of ornament. Yet it is at the same time picturesque; and its picturesqueness is obtained almost entirely by the projection of the roof. The effect of a deep shadow of this kind is analogous to the effect upon a man's face produced by a broad-brimmed hat. If it is done skillfully, it adds an element of mystery to what is in other respects a wholly unmysterious facade of countenance. Was it accidental that the Spaniard should have used more than any other people both the sombrero with its broad brim and the shapely projecting roof?

The rooms of the Kirk house will make a particularly strong appeal to people who like extreme simplicity of interior design. The living room, for in-

stance, is entirely devoid of ornament except a mantelpiece and cornice. It is merely a spacious room, finished in grey plaster, hung with tapestries and entirely free from incidental and "spotty" furnishings. It would be too severe for the ordinary American taste, which prefers a much busier and fussier kind of decorative finish, but its severity, in spite of a flavor of sub-consciousness, is not in the least ascetic. These bare Spanish rooms are refreshing in their coolness, their economy and in their absence of ornamental trivialities.

Messrs. Otis and Clark have designed many other attractive houses, of which perhaps the most interesting is that of John A. Jameson at Hubbard Woods, Ill. It affords an indication of their versatility, for it is a peculiarly successful example of the half-timbered house, which frequently looks particularly well among the oak woods to the north of Chicago. Mention should also be made of the residence of Mr. William T. Mason at Evanston, Ill., which belongs to a kind entirely different from that of the Jameson or Kirk houses, but which is also extremely good of its kind. The cleverness of architects who can handle so many different styles with so much taste and with such a nice sense of the idiom of each particular style is incontestable. It is to be hoped, however, that soon they will settle down and specialize in a particular type of design. The biggest successes in American architecture have been made by firms whose work was characterized less by versatility than by the mastery of one particular style, which can only be derived by patient and varied experimentation with its possibilities. Messrs. Otis and Clark are sufficiently able to make their friends hope that eventually they will settle down and bestow on their work a more strongly marked character.



THE HOUSE OF HOPE PRESBYTERIAN CHURCH, ST. PAUL, MINN.
CRAM & FERGUSON, ARCHITECTS.



The House of Hope Presbyterian Church

St. Paul, Minn.

Cram and Ferguson, Architects



THE House of Hope Church was one of the first churches founded in St. Paul, its traditions extending back to the beginnings of the State of Minnesota, in the last century. The original House of Hope was a Dutch redoubt built in early Colonial times on the trade route between Hartford and Manhattan as a sort of halfway house for protection against the red savages of Connecticut. The founder of the church knew of this old fort, and when he gathered his small congregation in what was then an Indian-beset wilderness, his church seemed to him like the old refuge house in the East, and he called it the House of Hope. An edifice in the lower town served the congregation until the dedication of the new building in the higher part of the city, on the bluff above the Mississippi.

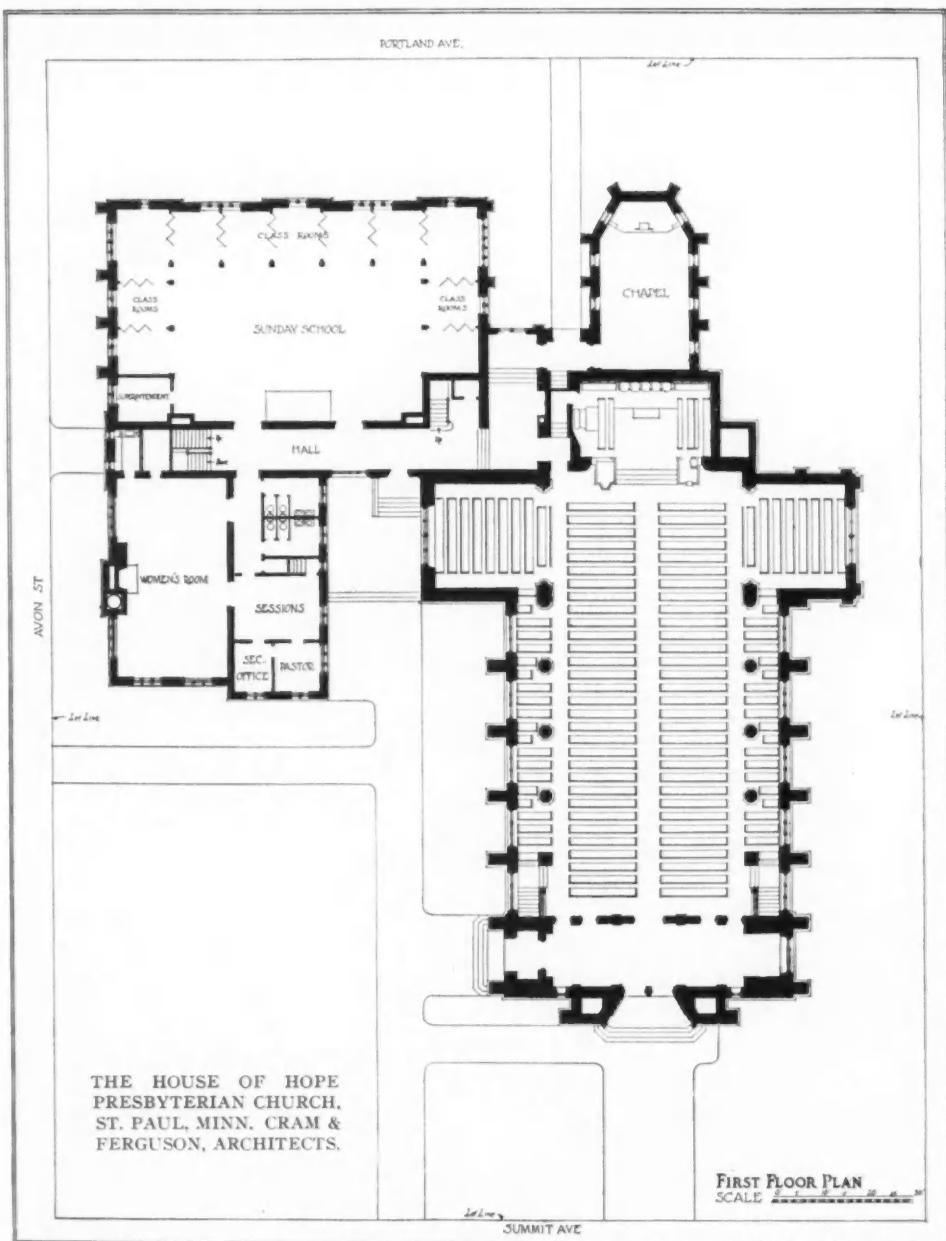
In consulting their architects the building committee laid down the principle that, while the church was to be as convenient and practically useful as possible, it nevertheless was to be traditional in spirit and dignified and religious in expression. They thought a three-aisled plan preferable on this account; and it may be remarked that, although the aisle is not merely an ambulatory, but contains pews, the number of dark seats is small. There is the usual front vestibule, with a gallery over it entered by stairs from the church. The two transepts have no galleries; the left is formed in the base of the tower, and only the right transept is visible as such from the outside. Back of the church proper is a small chapel for small services, and adjacent, at one side, are the Sunday School building and Parish House.

The "system" adopted in the nave is a sort of compromise between the usual

wide one-aisle interior with a hammer-beam roof and the ordinary three-aisle type without a clerestory. The crucial difficulty in a wide span like that of the House of Hope is in getting a proper curve for the arches of the roof trusses without unduly raising the height of the roof or unduly depressing the arch. This is here accomplished by springing the truss arches, not from the top, but from the base of the triforium above the ground story arcade. The added height makes possible a simple type of roof truss without hammer beams. The dark triforium is extremely effective and useful acoustically. True flying buttresses of concrete, under the roof, stiffen the wall on centers of the trusses. The roof of the chancel is a pointed segmental barrel vault, ribbed and panelled. The aisle ceilings are reinforced concrete slabs with stone arches on the lines of the columns.

The stone used throughout is Bedford limestone. All the trim, exterior and interior, is light buff stone, and the exterior ashlar is buff and blue mixed. The exterior walls are very good on account of the variety in color made by the use of the two grades of stone. All the tracery is stone, rebated for double glass on account of extremely cold winter weather. In the exterior of the large Parish House chimney some red brick are used to give color variety to the plain mass. The roofs are of green slate.

In the interior of the church the floors of the vestibule, aisles and chancel are of specially made tile. Except in the chancel, the quarries are largely plain red with semi-glaze tiles in color, used in spots and borders. In the chancel the whole floor is glazed and is very beautiful. The color of the ground tile is dull



THE HOUSE OF HOPE
PRESBYTERIAN CHURCH,
ST. PAUL, MINN. CRAM &
FERGUSON, ARCHITECTS.

yellow, with blue, gold and iridescent metallic glazes in the figured spots.

The woodwork is of fumed oak with a dull and rather light finish. In the panelling at the back of the chancel are set five large panels of brocade, which

give an effective focus to the whole interior. The arrangement of this chancel reverts to older Scotch precedent, and is unlike that in many Presbyterian churches. The pulpit and lectern are at the sides, with the communion table in

the center and clergy stalls behind it. There are lateral benches for the choir and organist; the organ console is in a shallow niche in the wall on the pulpit side. In the desks for the pulpit and lectern are concealed transmitters for a telephone system for deaf parishioners.

The lighting fixtures of the church proper are perhaps the most unusual features of the whole group. The motive was suggested by the name of the church. Man's "House of Hope" is the church, the Light of the World; in the fixtures the general forms were suggested by the images used in Revelation and elsewhere, where the New Jerusalem is seen by St. John in the form of a fortified city, and the companies of the Faithful throughout the world are conceived of as being in a continual state of siege by the world at large. The motives are therefore taken from mediaeval architecture, civil and religious. The lantern at the main entrance of the church, the vestibule fixtures and the wall brackets are in the form of small defensive fortifications, typifying the small bands of faithful people who throughout the world in different ways are sustaining their part in the conflict. The nave fixtures, in the shape of small churches, represent the Visible Church in the world, divided, but united by one mission. The large corona at the crossing is a symbol of the Church Triumphant, the Holy City, the New Jerusalem. It is a temple encircled by a wall which is pierced by twelve gates, typifying the twelve tribes of Israel of the old dispensation and the twelve Apostles of the new. The symbols of the Apostles are placed on the shields hung from the gates and above the temple are the dove and two crowns hanging, symbolizing the Trinity.

As to the actual fixtures, the most important are of course the nave chandeliers and the corona. In the former, which are hung low, it was necessary to avoid the possibility of direct light shining into the eyes of the congregation. The lighting bulbs have been placed above glass, which diffuses the light and prevents concentration below the

fixture. The openings in the sides of the fixture are glazed with bits of colored glass which give a most interesting effect of color when the lights are lighted. The corona is hung much higher, with all the lights exposed. The fixtures are hand wrought iron throughout, decorated in gold and color.

All the carving and other ornament in the church was designed to have its proper symbolic relation to Christian and local tradition. The anchor of hope, again referring to the name of the church, and the sword of St. Paul, the quasi-patron saint of the city, are constantly used. In the vestibule are four shields, typifying in the arms of their native cities the four great Protestant reformers, Edinburgh for Knox, Geneva for Calvin, Zürich for Zwingli, and Wittenberg for Luther. The corbels under the nave trusses are carved with scenes from the life of St. Paul; the chancel arch is carved with a vine pattern, representing the human family. Among its roots at one side are the Creation of Man, at the other the Birth of Christ, thus representing man begun in Adam and perfected in Christ. The chancel ceiling is painted and gilt, the shields bearing the arms of the United States, Scotland, Connecticut and St. Paul. Besides these are used the star, the crown of thorns, the rose and the triangle.

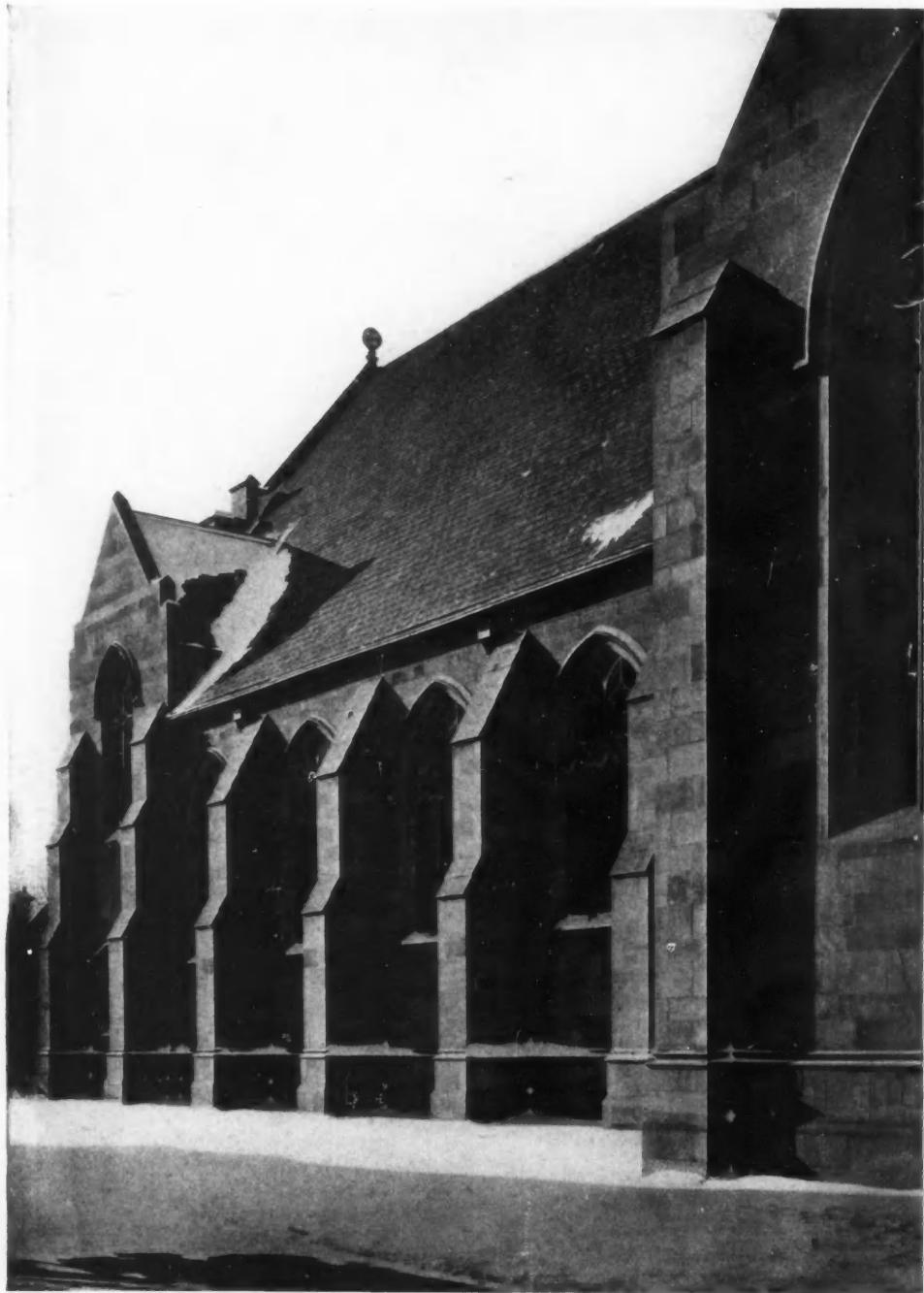
A considerable amount of permanent stained glass has been already installed. The subjects for all the windows were decided on beforehand, and laid out according to the traditional scheme. On the left side of the nave will be the Old Testament stories, on the right New Testament, in the right transept pre-Reformation, and in the left post-Reformation worthies. The great chancel window is composed of scenes from the Passion, and the window over the main entrance will show the Apocalypse. The chancel window, the right transept windows and the three aisle windows are already in place; if the standard of these is maintained in future gifts, the glass in this church promises to be noteworthy as an example of the best work of American designers.



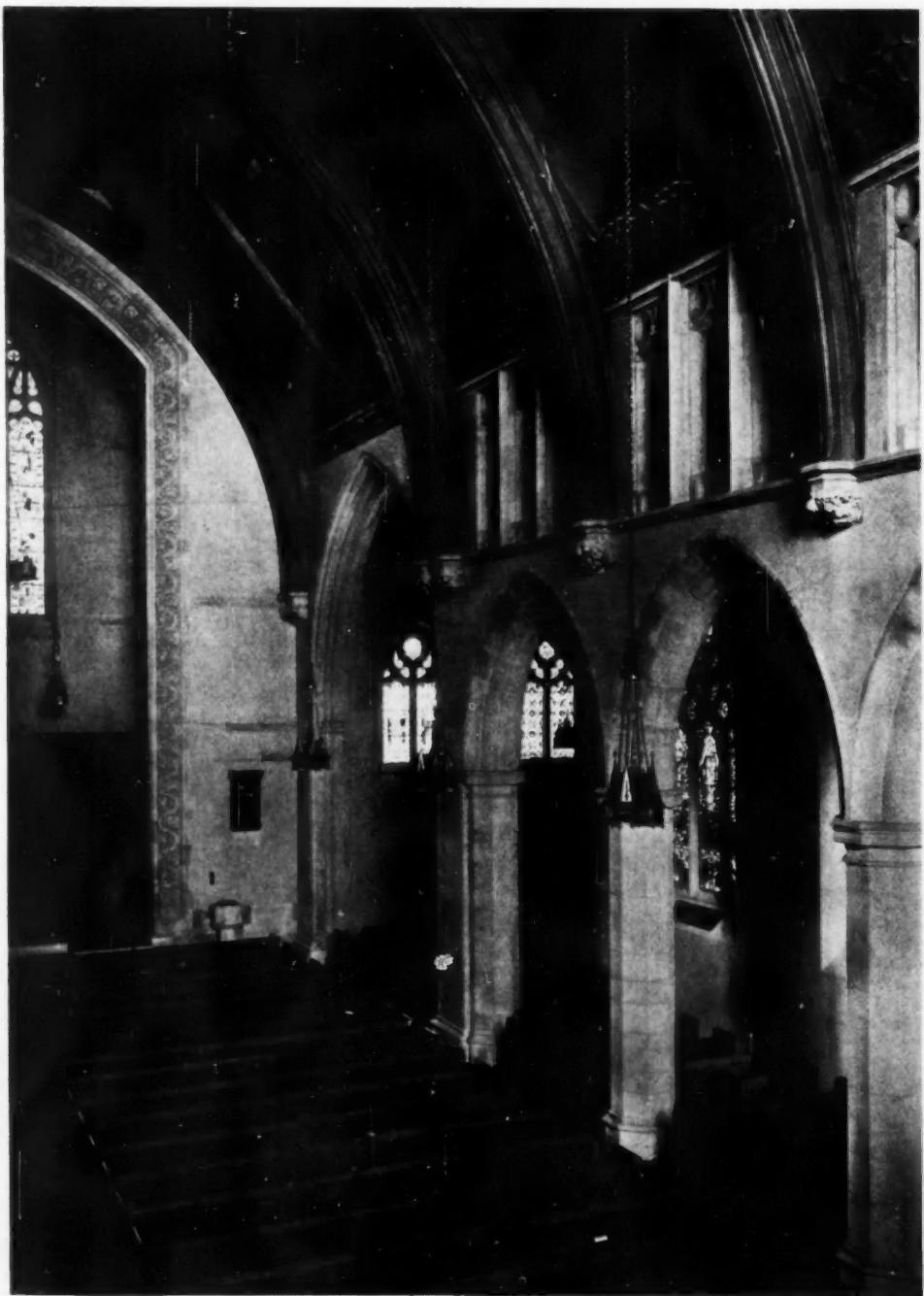
CHURCH AND PARISH HOUSE, FROM NORTH EAST—
THE HOUSE OF HOPE PRESBYTERIAN CHURCH, ST.
PAUL, MINN. CRAM & FERGUSON, ARCHITECTS.



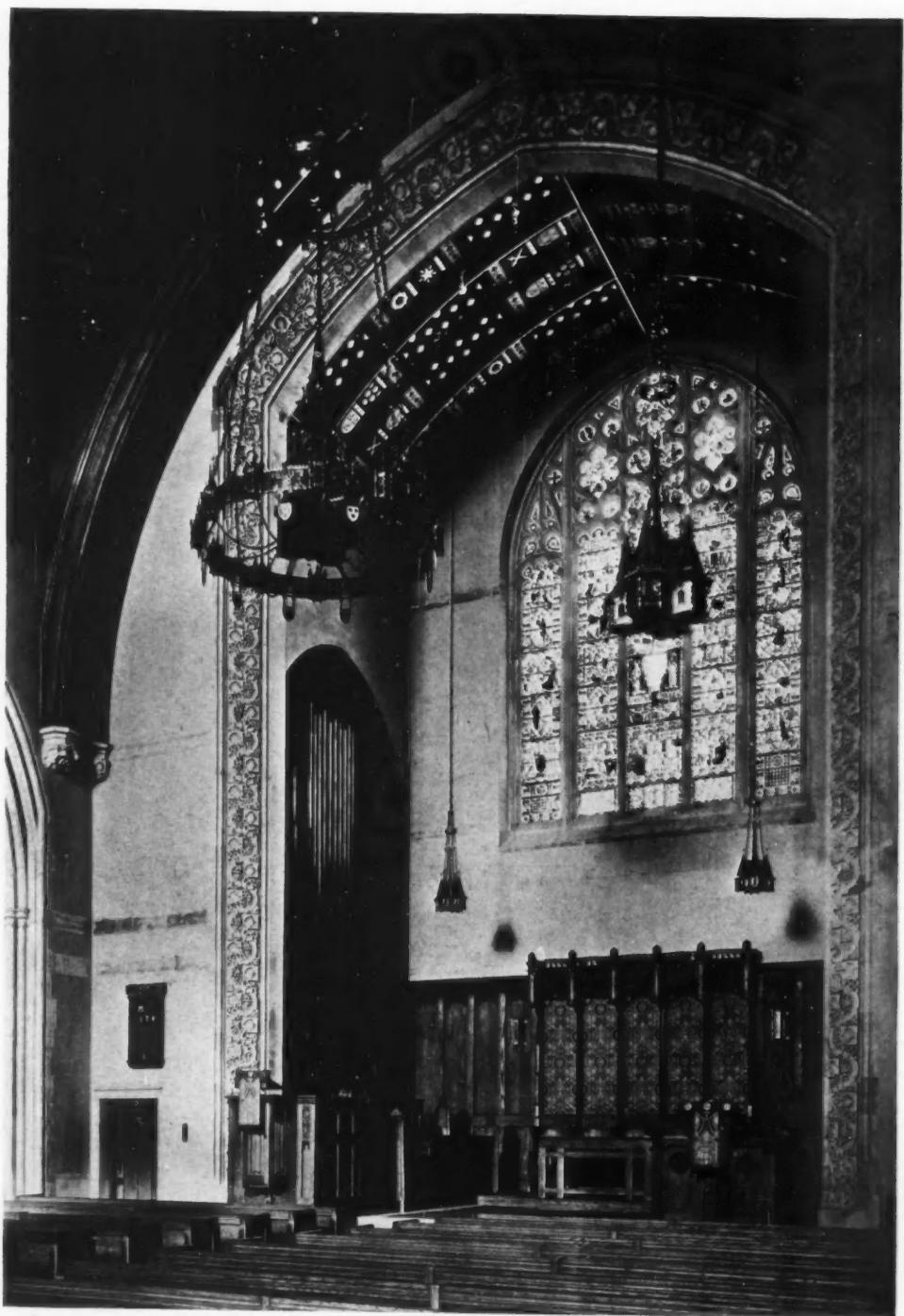
CHURCH AND PARISH HOUSE, FROM SOUTH. WEST—
THE HOUSE OF HOPE PRESBYTERIAN CHURCH, ST.
PAUL, MINN. CRAM & FERGUSON, ARCHITECTS.



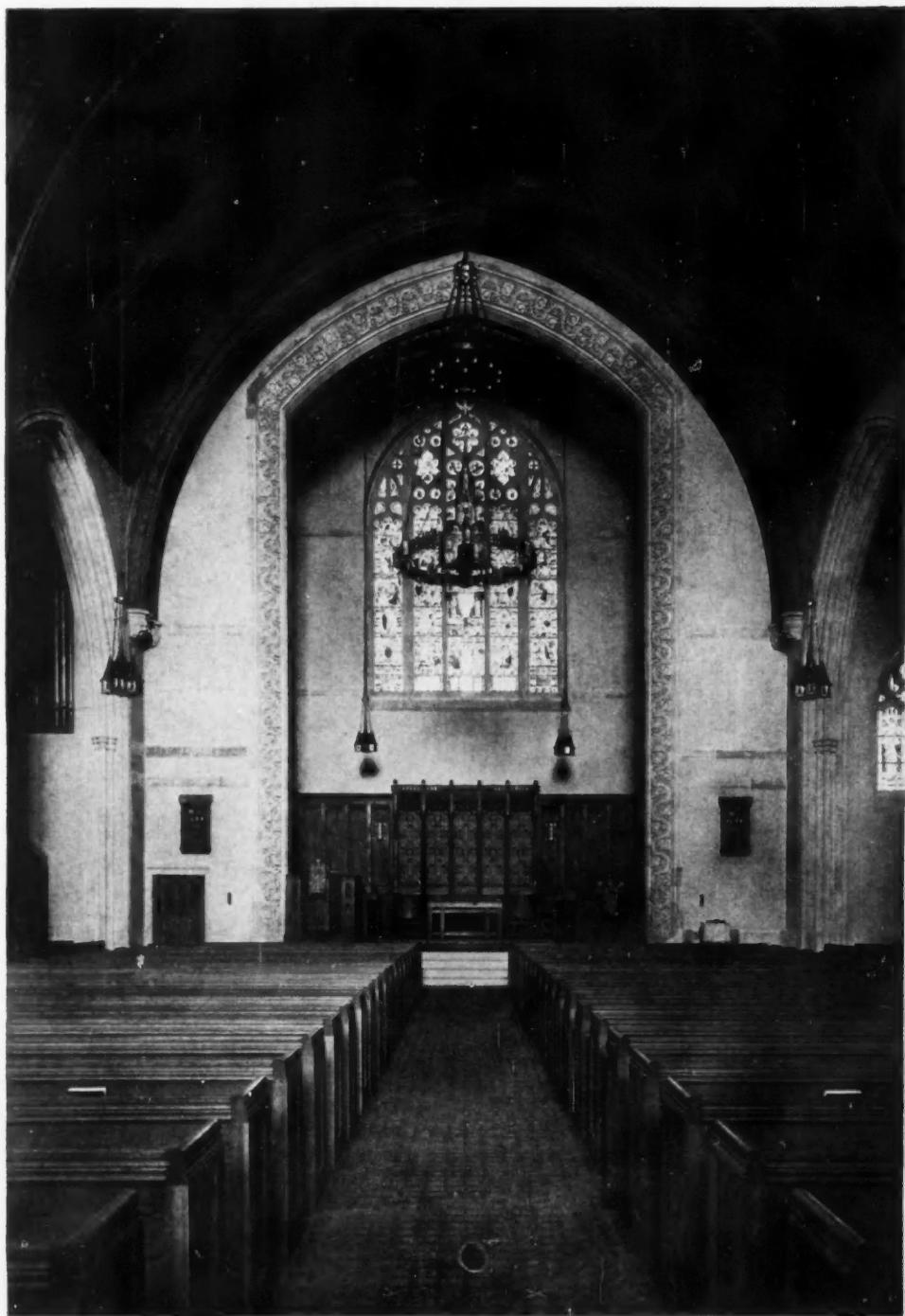
EAST SIDE OF NAVE—THE HOUSE OF HOPE
PRESBYTERIAN CHURCH, ST. PAUL, MINN.
CRAM & FERGUSON, ARCHITECTS.



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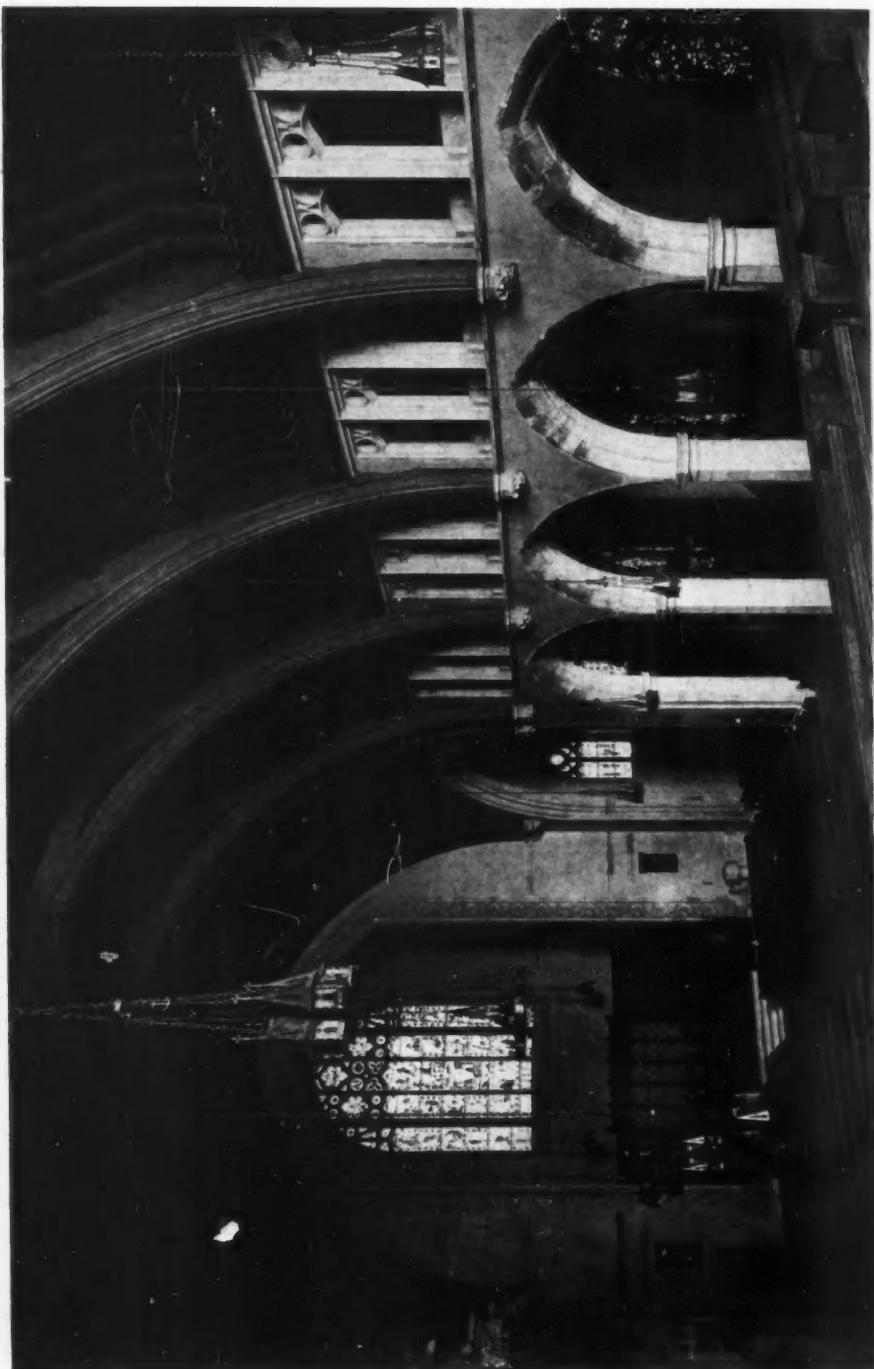


CHANCEL — THE HOUSE OF HOPE
PRESBYTERIAN CHURCH, ST. PAUL,
MINN. CRAM & FERGUSON, ARCHITECTS.



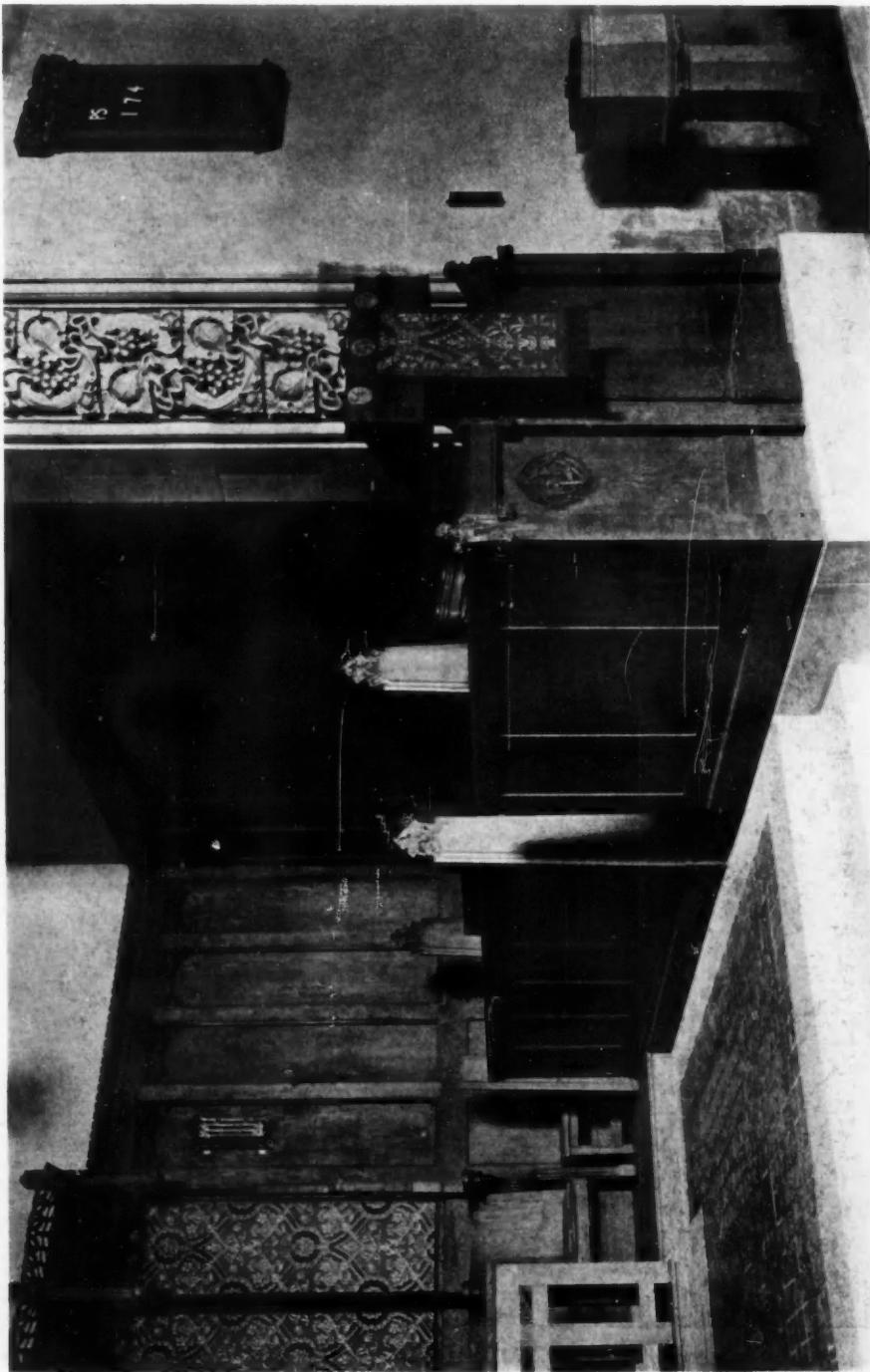
NAVE AND CHANCEL—THE HOUSE OF
HOPE PRESBYTERIAN CHURCH, ST. PAUL,
MINN. CRAM & FERGUSON, ARCHITECTS.

VIEW OF NAVE FROM GALLERY—THE HOUSE
OF HOPE PRESBYTERIAN CHURCH, ST. PAUL,
MINN. CRAM & FERGUSON, ARCHITECTS.



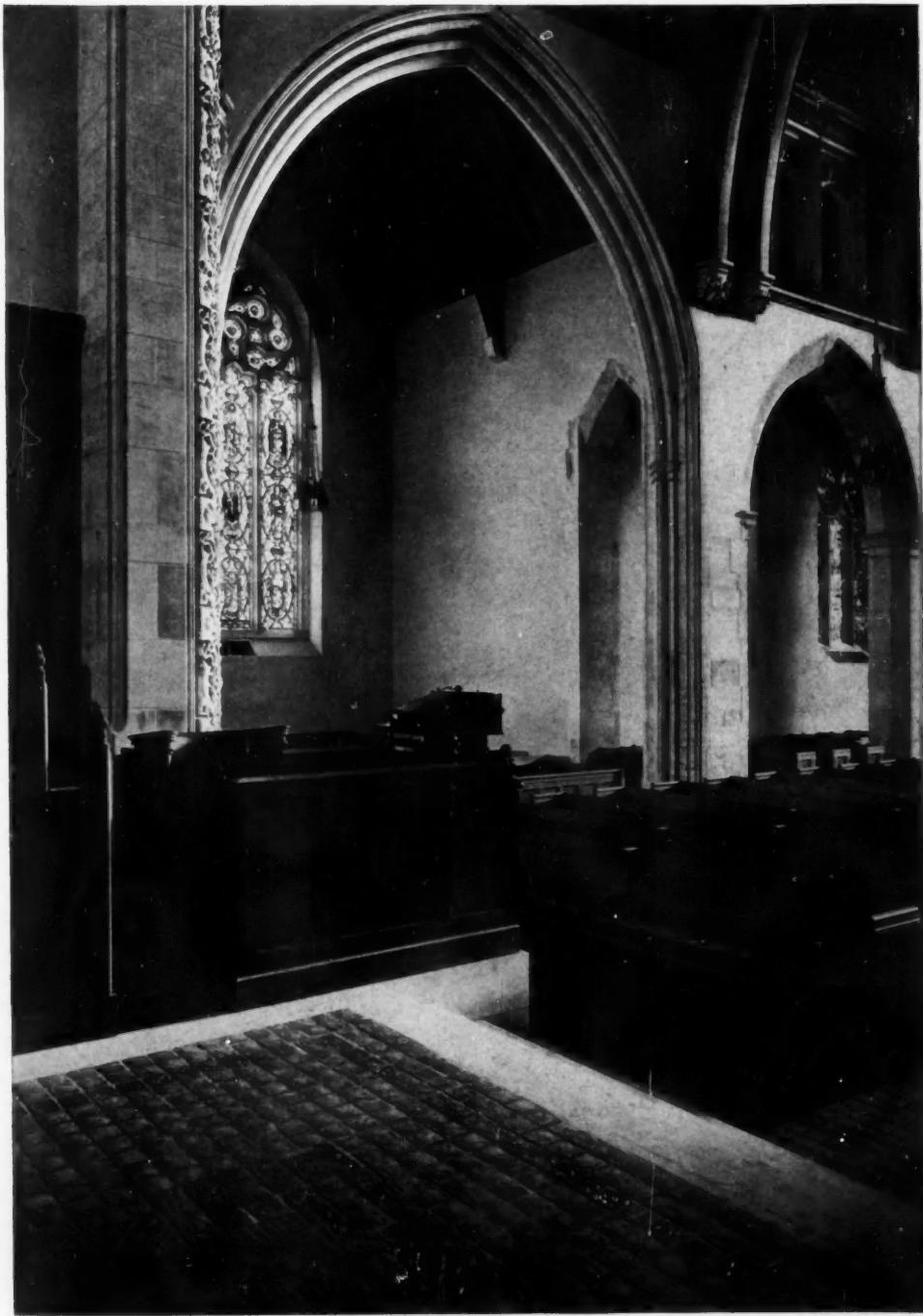
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DETAIL OF CHANCEL FURNITURE—THE HOUSE
OF HOPE PRESBYTERIAN CHURCH, ST. PAUL,
MINN. CRAM & FERGUSON, ARCHITECTS.





REAR OF NAVE, SHOWING EAST STAIRS TO GALLERY
—THE HOUSE OF HOPE PRESBYTERIAN CHURCH,
ST. PAUL, MINN. CRAM & FERGUSON, ARCHITECTS.



EAST TRANSEPT, FROM CHANCEL—THE HOUSE
OF HOPE PRESBYTERIAN CHURCH, ST. PAUL,
MINN. CRAM & FERGUSON, ARCHITECTS.



ELIZABETH CHAPEL — THE HOUSE OF
HOPE PRESBYTERIAN CHURCH, ST. PAUL,
MINN. CRAM & FERGUSON, ARCHITECTS.

ROMAN ARCHITECTURE AND ITS CRITICS

By A.D.F. HAMLIN

PART I - *The CRITICS & The INDICTMENT*

THE increase in the output of architectural books in English within the last few years has been accompanied by a general broadening of taste, both in the public and in those who write for its instruction. Dogmatic criticism and narrow partisanship in the discussion of styles and periods are less conspicuous than formerly; there is more catholicity of appreciation, and critical judgments are founded upon a better understanding of the fundamentals of architecture and a fuller knowledge of its history. There are, however, certain dogmas of the old-time criticism which have persisted in the face of larger knowledge, which are so erroneous, so contrary to the evidence of the monuments themselves, that they deserve to be examined with great care, in order that the reader may understand both why they are so plausible and persistent, and what are the errors which vitiate them. It is high time that both writers and readers should be put on their guard against perpetuating these errors.

It is worth noting that much of this popular literature on architecture has been the work, not of practising architects, but of studious laymen. Ruskin, whose "Seven Lamps of Architecture" and "Stones of Venice" have been more widely read than any other books on architecture in English, was a painter, a professor of art and a literary man, never an architect either by training or practice. Sir James Fergusson, whose "History of Architecture in All Countries" was for many years the only important work in English on the subject, was an accomplished scholar and traveler, but not a practicing architect except for one short period early in his career, during which he produced no work of any importance.

Among present-day writers Mr. Charles Herbert Moore, the author of "Development and Character of Gothic Architecture," "The Character of Renaissance Architecture," and "Mediaeval Church Architecture of England," was for many years Professor of Drawing at Harvard University; an enthusiastic student of medieval architecture and a writer and illustrator of more than ordinary force and ability, but not an architect. The late Montgomery Schuyler, author of "American Architecture"; Mr. Arthur Kingsley Porter, author of two large volumes on "Medieval Architecture," and of a valuable little book on "Vaulting"; and Professor W. H. Goodyear, author of "Greek Refinements" and of many articles in the architectural periodicals, have distinguished themselves in various fields of scholarly investigation connected with architecture, but none of them is an architect. Even the most widely known of American writers on architecture, the late Mr. Russell Sturgis, although trained for the profession and known as the designer of the Marquand Chapel at Yale and of a few other buildings, was always by preference a student and dilettante in his profession rather than an active practitioner.

It would be unreasonable to claim that none but practising architects should attempt to write about architecture, that they alone are qualified to criticize architecture. There is a wide field of literary activity open to non-practising students of architecture, and within certain fairly broad limits the layman may qualify himself, by study and observation, not only to popularize the history and archeology of the arts of building, and the fundamental principles on which they are based, but also to pronounce critical judgments on buildings and styles. One of the best

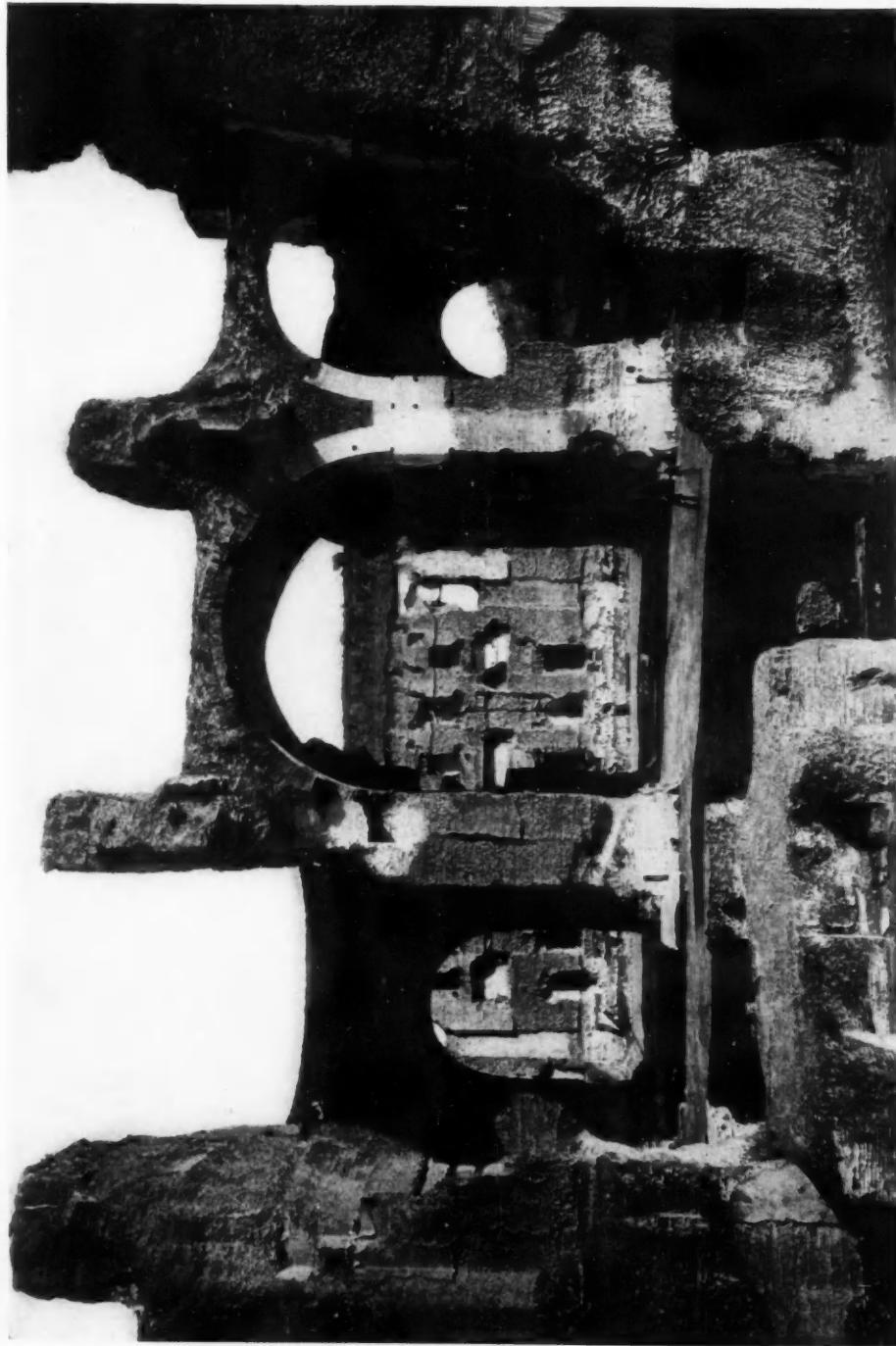
books on English Cathedrals is the work of a non-professional—an American lady, Mrs. M. G. Van Rensselaer. Nevertheless, in this field the amateur stands on somewhat dangerous ground. Every one, of course, can express his own personal judgment of a building or style. But when he addresses the general public—and all the more if he speak with a certain authority based upon his reputation as a writer or scholar—any mistake he may make in his verdicts is disastrous in its effects precisely in proportion to that reputation. The error is popularized and accepted, and unless controverted by some one who can speak to the same audience with equal authority, it becomes in time a part of the established traditions of popular taste and judgment. This explains the wide currency of the misconceptions and misjudgments to which these papers will seek to call attention.

The reason why even the scholarly amateur or the accomplished dilettante is in constant danger of critical misjudgments, lies in the fact that one entire side of the art he deals with is for him an unexplored country; the side of practical, creative design. A whole array of considerations that enter into the production of even the simplest architectural design, first on paper and then in the material building, can be fully appreciated only by one who has toiled over the drawing-board, dealt with questions of feet and inches, calculated strains, watched the excavation, the piling of the masonry, the details of the finishing, and solved the countless minor problems that arise in the working out and execution of the design. The translation of an abstract architectural conception into the concrete form of the completed building is a part of the architect's work which should form an important factor to be considered in judging the work. No layman can judge a plan with the appreciative fairness of the man who has created many plans, and to whom a plan is not merely a diagram of internal arrangements, but a key to and revelation of the entire structure. The purely theoretic and transcendental criticism of architecture can never do full justice, because it ignores the inner processes of architectural creation, the amount

and nature and importance of many elements and forces which the designer of the work under criticism was compelled to consider and deal with. And it is precisely here that even broadminded and scholarly literary critics often fail.

Nor are the architects themselves quite blameless in their critical estimates. They are liable, however, to err in a different direction. Through inadequacy of historical scholarship, they sometimes fail to take broad views, they become partisans of this or that "style" or set of forms, and intolerant of methods of design different from their own,—as when one of them recently wrote to the author of these papers that there were but three legitimate styles of rural house design proper for Americans to employ, the Georgian or Colonial, the Swiss and the English! Valid architectural criticism must be based first of all on broad historical scholarship; it must look through, and around, behind and beneath all the styles and their products, to discover the hidden as well as the obvious factors that shaped them, the point of view of the designers and their method of approach to the problem. It must take account of forms and details as results, not causes, and seek for the reason of their adoption. The critic must consider alike the plan and the construction, the composition and the decoration; note what is fundamental and what is superficial; what is essential and what secondary. He must learn to distinguish between mere personal predilections and sober and matured judgments based on sound reasoning from established premises. It is not fair or valid criticism to judge the style and products of one age, period or people by the principles and standards of another age or period or people. It is of course fair, and indeed instructive, to compare and contrast different styles and periods, but in the critical estimate of each, the critic is bound in fairness to frame his judgment in the light of the conditions, the circumstances, the culture and the needs of its own time and environment. The capacity for sympathetic appreciation of widely differing styles is rare, but it is essential for really valid criticism. For the critic should not

FIG. 1. RUINS OF THE BATHS OF
CARACALLA, ROME, VIEW ACROSS
THE TEPIDARIUM AND FRIGIDARIUM.



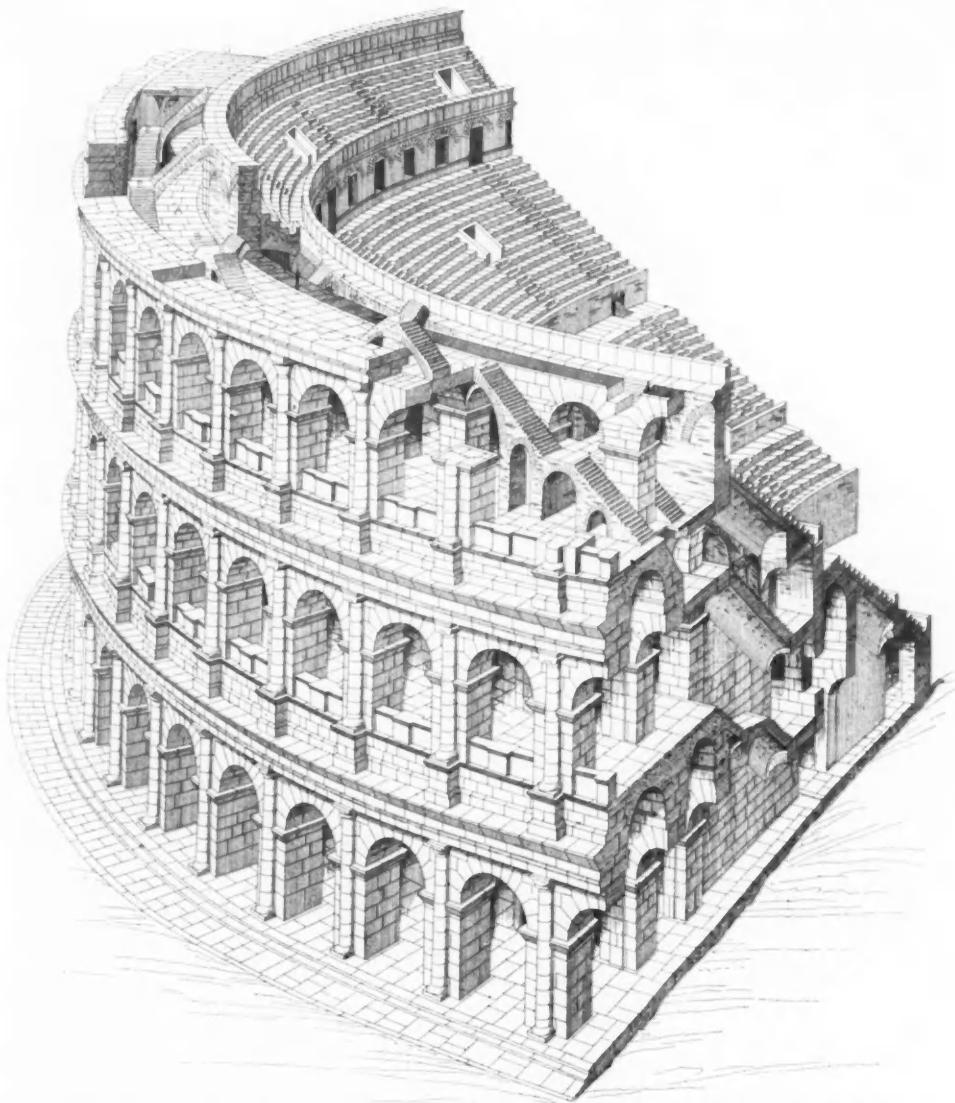


FIG. 2. STRUCTURAL SYSTEM OF THE COLOSSEUM AT ROME, FROM DRAWING BY THE LATE PROF. JULIEN GAUDET, PARIS.

be like a special paid advocate of one side against another, presenting that side in the most favorable light and disparaging to the utmost the other; but rather like an upright judge who, with full knowledge of the law, sums up in perfect fairness the *pros* and *cons* of both sides, that the jury—the public—may draw its own conclusions; himself pronouncing a final

verdict *pro* or *con* only when the evidence that way is convincing to himself, and such as should carry conviction to fair minds generally.

II.

The treatment accorded the architecture of imperial Rome by the majority of modern writers in English is an interesting illustration of ready-made tradi-

- edge of the law, sums up in perfect fairness the *pros* and *cons* of both sides, that the jury—the public—may draw its own conclusions; himself pronouncing a final

tional criticism. Early in the last century interest in Greek art received a prodigious impulse from the explorations in classic lands which followed the publication of Stuart and Revett's "Antiquities of Athens," the bringing of the Elgin marbles to London and the achievement of independence by the Greeks in 1829. The poetry of Byron was in favor in the fashionable world and the ancient glories of Greece were a prolific theme of conversation and literature. The perfection of Greek architecture and sculpture was universally recognized, and to praise Greek art was accepted as an evidence of culture. The new enthusiasm was largely literary and scholastic in England and Germany, where it chiefly prevailed, and later in America, where every English movement found its echo. Few of those who wrote and declaimed on the supremacy of Greek art had any real and profound knowledge of their subject, at least any first-hand personal acquaintance with its monuments. But Greek was compared with Roman art, always to the disparagement of the latter, and to decry Roman architecture as in every way inferior to the Greek became an accepted mark of superior taste and artistic discrimination. Creative power in design had sunk in England well nigh to its lowest depths, and the revival of architecture was sought in the substitution of Greek for Roman details. So far as this tended towards refinement of detail, the result was beneficial, but English architecture gained nothing in invention; it became largely an art of facing indifferently planned buildings with imposing Greek colonnades. At the same time, another school of reformers was developing the Gothic revival, as a protest against all classic "pagan" forms, and its apostles were declaiming with equal vehemence against Greek temples, Roman Pantheons and all the works of the irreligious Renaissance. At the hands of these various reformers, hardly one of whom was a really capable architect, if an architect at all, the Romans fared very badly. They were pagans—coarse, vulgar conquerors, destitute of taste, mere copyists and imitators of the Greeks, and bad ones at that; and though they produced

a few rather fine buildings they were the first corrupters of architecture and the prime authors of all the falsehood, sham, plagiarism, confusion and bad taste that have cursed architecture ever since the decline of Greece, except during those blessed middle ages, in which the Gothic church-builders for a few centuries revived and maintained a true art on sound principles.

This is not a travesty of the nineteenth century attitude towards Roman architecture; it is based on the actual language of reputable writers, from Pugin to our own time. For the critical verdicts of the Hellenic and Gothic enthusiasts of the first half of the nineteenth century have been almost blindly accepted and reiterated by so many of the writers of the last fifty years, as to have entered into the established tradition of architectural criticism. The persistent repetition of disparaging phrases and the utterance of sweeping characterizations in strong and picturesque language, are much easier than patient, impartial investigation leading to independent judgments. Those who appreciate the noble and virile qualities of Roman design are somewhat to blame, no doubt, for this prevalence of hostile and condemnatory criticism, in that they have never seriously undertaken to reply to it. I am not familiar with any systematic study of Roman architecture that has taken notice of this persistent and widespread depreciatory criticism and attempted to meet it.

III.

The chief counts of the indictment drawn up by the hostile critics of Roman architecture may be summarized somewhat as follows:

1. Roman architecture lacks the higher qualities of design—purity, refinement and good taste, and substitutes for these a pompous grandeur and a specious magnificence. It is coarse, vulgar, pretentious.
2. The Romans were plagiarists, not originators; they appropriated, copied, travestied and misapplied the forms of Greek architecture.
3. While displaying great engineering skill in massive constructions, the architecture the Romans evolved was on the

FIG. 3. THE PARTHENON IN 1755. FROM STUART
AND REVETT: "ANTIQUITIES OF ATHENS."

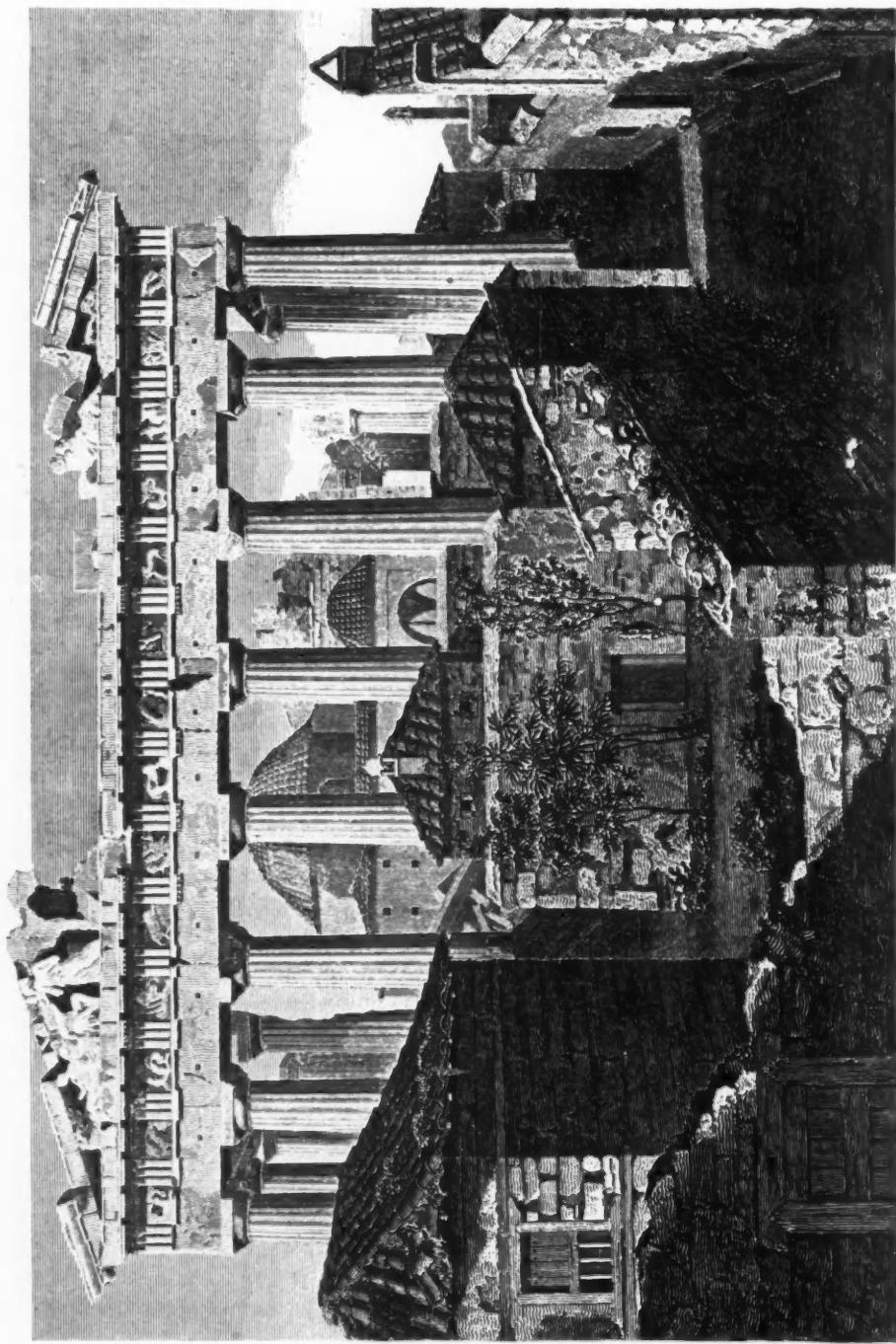


FIG. 4. STUCCO RELIEF DECORATION
IN TOMB ON VIA LATINA, ROME.



plastic side illogical and inartistic in that it converted borrowed structural forms into a mere decorative apparel. Particularly objectionable was the Roman combination of the arch with engaged columns and entablatures.

4. By the adoption of this vesture of sham columnar forms, the Romans introduced into architecture an element of falsity which has wrought disastrous consequences in the Renaissance and modern times.

5. By nature inartistic, the Romans substituted repetitive or conventional ornament for the sculptural decoration of which they were incapable and thus degraded the art; while by reducing the Greek orders to an arbitrary system of mathematical formulae, they put a mechanical stamp on all their work and sacrificed the last vestige of excuse for using the Greek orders. In consequence of this, Roman architecture is everywhere monotonous and uninspired.

This is a pretty severe indictment! The visitor to classic lands is warned against allowing himself to be betrayed into anything like admiration by the wanton lure of such corrupt and pernicious works as the Pantheon or the Arch of Titus at Rome, the House of the Vettii at Pompeii, or the Maison Carrée at Nîmes. He might otherwise allow an unguarded exclamation of delight to escape him on seeing a restoration of the order of the Temple of Castor and Pollux or of Faustina. He might discover exquisite delicacy in the stucco reliefs of the Baths, of the Forum of Pompeii, of certain tombs on the Via Latina, or fragments in the Museo delle Terme at Rome. As an architect he might in a forgetful moment declare that the planning of the great Roman Thermæ, or of the Forum of Trajan, or of the Basilica of Constantine, seemed to him superb in its originality, ingenuity, artistic effectiveness and grasp of the problem. He might even—horrible thought!—express delight and admiration in the contemplation of the Colosseum, or even of the Hexagonal Court at Baalbec. Having been, however, properly instructed by the critics, he would repress his uncultured enthusiasm, and shaking his head at the æsthetic deprav-

ity of the Romans, restrain his emotions until he could let them loose before the ruins of the Parthenon or of Melrose Abbey.

IV.

Let us rehearse briefly the charges of the critics under the first count—lack of taste and refinement, coarseness, vulgarity, pretentious magnificence in place of fine and pure design.

Fergusson, in his "History of Architecture" (I, 294), says of the Roman buildings "in every city from the Euphrates to the Tagus": "In all cases they display far more evidence of wealth and power than of taste and refinement. Whenever ornament is attempted their bad taste comes out" (p. 324). The Colosseum "does not possess one detail which is not open to criticism and indeed to positive blame" (p. 326). "The taste displayed in them" (triumphal arches) "is more than questionable" (p. 340).

Burn, in his "Rome and the Campagna," remarks that "in all attempts to create ornamental structures they" (the Romans) "failed to produce anything more than gigantic and grotesque imitations of Greek art. (!) From an artistic point of view, therefore, the study of their buildings is barren." Here we have the verdict of a blind and unreasoning Hellenist, to whom even the Pantheon and the Colosseum are "imitations of Greek art!"

Ruskin considers that the Greek Doric capital was spoiled "by the Romans in endeavors to mend it," and that the Roman modillion (cornice-bracket) was "barbarous and effeminate." In a recent and generally excellent one-volume "History of Architecture," Mr. H. H. Statham pronounces the Ionic cap of the Temple of Fortuna Virilis "with its small feeble volutes a poor cast-iron looking affair." Reber condemns the Roman four-sided Ionic capital (the "Scamozzi Ionic" type) as an inartistic invention which destroyed the character of the capital. But it is A. K. Porter, who, in the first volume of his "Mediaeval Architecture," deals the most stalwart blows against the artistic claims of Roman architecture. "Under Rome," he says, "magnificence was substituted for refine-

ment"; "for refinement and delicacy was (*sic*) substituted coarseness and display." It is the "depraved taste" of modern times which has perpetuated the Roman combination of arch and order. The Corinthian order is said to have "crowded out the *less blatant** orders." "Capitals and mouldings seems to be machine made." "The effect of the whole, for all its blatancy, is inexpressibly dreary and monotonous." And again: "When our eyes have been refreshed by the study of the purer forms of Greek or mediaeval architecture, the Roman designs at once appear in their true vulgarity." (Chapter I, *passim*.)

These quotations by no means exhaust the allegations of the critics as to the tastelessness and inherent artistic poverty of the defendant, but they suffice to show their general attitude. Regarding the second count—that of plagiarism and misuse of the Greek forms—the critics are quite as severe. "This Greek architecture," says Ruskin, "was clumsily copied and varied by the Romans, with no particular result . . . except only that the Doric capital was spoiled," etc. To Ruskin, indeed, all classic "orders" are contemptible. In the "Stones of Venice" he expresses his belief that "a single inventive soul could create a thousand orders in an hour"—probably the greatest compliment ever paid by a transcendental critic to the creative powers of the soul! With modern mechanical ingenuity and the rules of Vitruvius, Ruskin was quite confident that a machine could be made "to furnish pillars and friezes to the size ordered, of any of the five orders, on the most perfect Greek models in any quantity," which any bricklayer could set up at their proper distances, "so that we may dispense with our architects altogether." (Vol. 3, ii, XC.) The Ionic he calls a "ram's order," which could easily be made an "ibex order" or an "ass's order." The Roman Tuscan and Doric orders are "among the most stupid variations ever invented upon forms already known" (*ibid*, i, App. 7). Mr. Porter, in the chapter already quoted from, declares that "Roman art lacks originality, and is in fact, little more than an adapta-

tion of Greek models to suit the pomposity and vulgarity of Roman taste." And Mr. Sturgis, commenting on the great Temple of Venus and Rome, considers that "the Romans have little claim to originality as builders or as makers of plans; what they knew best was how to appropriate the ideas, as they appropriated the wealth, of the Mediterranean world." "The pure ornament of the Romans was as nearly a reproduction of the Greek as they could make it," says Porter. And, lest one should unduly magnify the importance and originality of the Roman invention of the modillion-cornice, he explains it by the airy remark that "it occurred to some genius to clap both dentils and modillions upon the same entablature." "The forms of debased late Greek art the Romans fixed into a cut-and-dried canon from which minor variations were possible, but no real progress": this is Mr. Porter's final verdict on Roman originality.

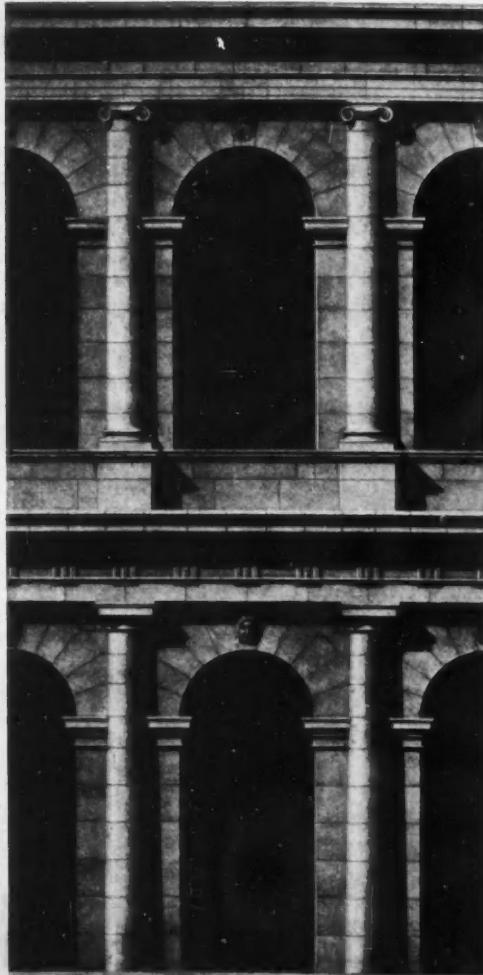
The third and fourth counts are supported in part by the passages quoted above, and by many others. They allege, in brief, the illogical application to Roman arcaded and vaulted construction in brick and concrete, of the forms filched from Greek architecture and converted or diverted from their original structural function to that of mere decoration—a false and pretentious veneer of misused detail. Particularly to be condemned is the marriage of the arch with the columnar system. This detestable alliance, parent of specious villainies through the last five centuries, thanks to the "depraved modern taste," receives the special castigation of the critics. Of these, Fergusson is by far the most moderate, finding that the two systems, the columnar and the arcuated, "although not without a certain richness of effect" are "too distinctly dissimilar to be pleasing." Mr. Sturgis characterizes the columnar apparel of the Colosseum and like structures as "this outer decoration, the sham columns, the make-believe entablatures, the whole imitative structure built up with the real mass behind" (Hist. of Arch., i, 304). In his earlier work "European Architecture," he calls it "this decoration by means of real arches

*The italics are ours.

THEATRE · DE · MARCELLVS
ELEVATION · PROFILS · GENERAVX · ET · PLAN · AV · XLth



SVR L'AXE D'UNE ARCADE



SVR L'AXE D'UNE COLONNE

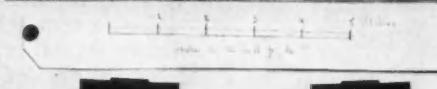


FIG. 5. ARCADED ORDERS OF THE
THEATRE OF MARCELLUS, ROME. FROM
A FRENCH DRAWING (GUILLAUME).



FIG. 6. ARCH OF TITUS, ROME.

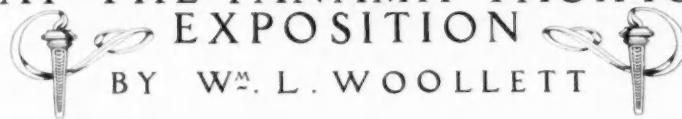
and imposts flanked and framed by a make-believe post-and-lintel architecture." He admits its popularity and even ascribes to it elements of beauty, serenity and stateliness, but thinks it appeals most to people "not very sensitive to the delicacies of fine art" (pp. 95, 96). Of the arches of triumph, Reber says that in them we have "a mass of masonry enclosed in columns and entablatures which were merely ornamental features without structural significance." Mr. Statham describes the Roman design of arch and order as a "planting" of half-columns "all around the exterior, appearing to carry entablatures which were really carried by the arches between the order" (*sic*); and calls these orders "only a kind of scenery planted onto a building with which they had no real structural relation" (History of Architecture, pp. 144, 145). Further on he says that this mistake "has left a long legacy of falsehood to architecture: a falsehood revived at the Renaissance and still frequently perpetrated in obedience to the tyranny of custom." Mr. Porter is, of course, very severe in his animadversions on the Roman orders in general. Reproducing a beautiful drawing of the Doric order of the Basilica Julia, he considers it a "sufficient commentary on the decline of Roman art." The use of the pedestal in Roman architecture he calls "a gratuitous addition," which the tone of the context indicates is intended as a condemnation. While the Greek columns consistently combined ornamental and constructive functions, "the Romans made them almost wholly decorative." *After their buildings were built*, he declares, "the Romans applied the columns as a surface decoration, either in the form of freestanding porticoes or peristyles, or more frequently as an engaged order built into the wall." This was certainly a singular method of procedure, of which the authorities have hitherto been strangely ignorant!

The fifth count deals with the charge of stereotyped rules of design. Many of the quotations already made bear upon this point. Mr. Statham thinks that the Romans looked upon the employment of the orders as constituting

in itself the art of architecture, so that the latter became little more than the planting of the orders on all sorts of buildings. This is a surprising judgment to be uttered by an architect so well-informed in general as Mr. Statham. Mr. Porter pronounces Roman capitals and mouldings to be "machine-made," and declares that "the effect of the whole, for all its blatancy, is inexpressibly dreary and monotonous." "From the Persian Gulf to the Firth of Forth, from the Baths of Caracalla to Constantine, Roman art shows a lack of variation absolutely without a parallel in history" (Med. Arch., i, 32). Mr. Sturgis, in the comments on the Temple of Venus and Rome already referred to (*ante*, p. 433), says that "all this, except the building in mortar-masonry and the idea of a vault, *might have occurred to a Greek*" (the italics are ours), and that "the Romans have little claim to originality" even "as builders and makers of plans." Reber, more generous, notes that their borrowings of foreign features were confined to the external apparel, while he credits the Romans with supplying the general disposition and constructive forms of their buildings.

This mass of hostile criticism has been culled from a few books only, but they are all books which have been put forth with certain claims to authoritative teaching, and their judgments are typical of a much larger mass of similar verdicts to be found in textbooks on architecture, books of travel and magazine articles by English and American writers. The volume of this testimony and the unity of spirit that pervades it are impressive, and either convincing or suspicious according to the way we seek to account for them. The testimony certainly seems convincing to the average reader who has no means of testing its validity. It puts Roman architecture on the defensive; and those who, in the face of this indictment are brave enough to admire the defendant, must stand up and show cause why the verdict of condemnation should not be pronounced on all the counts. The case for the prosecution is apt to look very serious until the testimony and arguments for the defense are presented.

COLOR IN ARCHITECTURE AT THE PANAMA-PACIFIC EXPOSITION



BY WM. L. WOOLLETT

EXPOSITION architecture would not ordinarily be considered, on account of its evanescent character, a proper subject or example for elucidating principles of architecture. Exposition architecture, as we commonly know it, in the ultimate, must appear to be unreal. It is palpably a colossal Dream City, and must be appraised in terms peculiar to itself. And yet in the realization of such a "dream" the æsthetic point of view should be somewhat similar to that obtaining in architecture under normal conditions. The architectural scheme, even of an exposition, requires conformity to recognized standards within certain limits; i.e., the peg of reason on which we hang the emotional appeal, the form and structure or implied structure of an exposition building, bears a similar relation to the color scheme as in ordinary conditions. In the instance of the Panama-Pacific International Exposition, at San Francisco, the element of color is so pronounced a feature, and the use of color has been hailed with so much of popular acclaim, that there appears to be here a special opportunity to learn something of the meaning of "Color in Architecture."

In the panorama of this exposition we may in our imagination see in sumptuous array of color, vast bundles of oriental stuffs, vistas of palaces and temples and arcaded halls, and the gardens of Babylon and visions of Atalanta come true near the cobalt waters of the Pacific. We may sprinkle this oriental melee of color with the gems of the Indus, whilst the galleys of victorious fleets laden with captured splendors vie with each other for landing space at the steps of the Great Water Gate. Or we may in cold analysis ask of our reason, why this? or why that? and in the process lose perhaps some of the wild joy of abandonment.

Viewed as a serious attempt to do something beautiful, this work, in order to lay claim to excellence, must qualify not only in its color appeal but in form and abstract values as well.

The essence of a work of art, according to common consent, resides in an expression of personality. Without the individual spark there is no such thing as art. Two men cannot paint a portrait, write a poem or a symphony, or produce a piece of architecture. Accordingly Jules Guerin, greatest of our architectural colorists, was intrusted with the commission of advising the Board of Architects of the Panama-Pacific International Exposition, in order that the whole scheme might be the harmonious expression of one personality in color.

In a critical view of a work of this sort it is desirable to bear in mind that it is easier to criticise than to create—and easier to improve than to improvise. However, the work of these builders of the exposition, who have been pioneers in many respects, seems to emphasize that such a work is more easily created in parts by a group of artists than it can be satisfactorily made as a whole to a single critic. And it remains to be proven that this assemblage of beautiful bits of architecture, bound together in a harmony of color, is necessarily a work of art.

The general color of the exposition is exotic, Eastern. A great emotional poem in color reverberates and pulses for our delectation under the lazy blue of the sky and beside the rippling blue of the waters. From masses of warm walls of Travertine and the warmer tones in the roof areas, opalescent, greenish domes lift their curves of scintillant light into the heaven of California days. Jeweled towers vie with the stars and the sheen of the ocean, and at the first sight of the

spectacle the heart and mind are tingled into expectancy. Clothed in a vast mantel of soft grey colors, resplendent with unseen lights, blooms a vista of color gardens. Like a spirited horse tethered, the mind strains to be off on the wings of exploration of this panoply of light. Here the radiance of a cashmere shawl greets the eye, there the soft tone of the Ottoman's saddle bag, then the dominant note of some old Sienna rug, or the gleam of a Saracen blade. A thousand minor notes of the dominant color scores greet the eye. A vast pulsing mosaic of color, a palette of unrivaled beauty, stirs and for a moment enslaves the imagination. And then, after the first flush of expectancy, of exultant emotion tricked into an overwhelming impulse through the magic of color, comes analysis.

To the searcher for abstract beauty, to him who comes with the mind of the Occident as well as with the soul of the Orient, the Exposition City has told its best in the first "mad moment" of beauty. Here the story ends. A tragedy apparently; but no, I say "ends" with a purpose, for in thus speaking broadly we free ourselves to pass to detailed analysis of a very interesting architectural situation, having in unqualified terms given honor where honor is unquestionably due.

In a work of this magnitude there are, of course, two points of view: One, the consideration of ensemble, of mass, and the like, and the other, consideration of details.

In matters of detail the use of colored pigments is probably the most noteworthy phase of the architectural scheme. Everything which the eye rests upon, whether of wood, iron or plaster, has been painted. The dominant note is the walls of imitation Travertine stone, which is in reality colored plaster with a special texture.

In the handling of architectural detail, in the doorways, sculptured groups, and other details which are best examined near at hand, there are gems of architectural beauty and harmonious color. The portals of Faville, for instance, foiled by the studied calm of cliff-like

walls, are rich beyond comparison, mellow to the point of antique delight and juicy with time-worn color, a dream for the artist's fancy. However, taken in conjunction with the masses of the buildings of which they form a part, and viewed from a point where the ensemble is possible, these spots of transcendent interest are reduced to smudges of color. Because the architecture was composed aside from the colorist's conception, these gems of ornament have lost, to a degree at least, their capacity to convey the true subtlety of the artist's thought. The application of pigment has softened and detracted from the values. Frequently there remains little of thought directing quality. However, there is as a residue a delightful texture, a rug like quality, if you please, due to the juxtaposition of a variety of nicely balanced color values. But the structure, the static quality, the thought directing element, all these have been depleted or have disappeared in a subdued pastel sketch effect. Viewed as specimens of detailed decoration near at hand they are poems of ornament.

A consequence of this loss of thought-directing detail is an absence of scale. You feel that you are looking at one of Jules Guerin's prints; whether a real live water color drawing or a reprint—one ponders.

The Tower of Jewels is a most interesting example of this submerging of the architectural interest in color dominance. Here a superb pile of richly formed, elegantly proportioned masses has been denuded of its original vitality. The various and strongly colored parts have become detached, the sense of unity is gone, and as a result the composition is without appeal as to its colossal size. In the Tower of Jewels the details, such as the eagles, equestrian statues, etc., have been reduced by an all-over coat of color to mere lumps whose form and character lines are so unannounced that there is nothing by which the mind can gauge the quality or estimate the relation to the whole. One intuitively feels that the designer had his matter well in hand, that he knew where his chief darks should come. There is an intrinsic fine balance and lift and lift

to the composition as a whole, due to the nice distribution of values. The applied pigment has readjusted and misplaced the original color values so that the real "kick," as determined in the designing architect's mind, is gone. The color "kick" has resulted in making this feature heavy as a mass, whereas its place in the composition demanded lightness, effervescence, billowing, fluffy, cloudlike, puffy exuberance, a gathering together into one giant "parfait" of all the lightness and daintiness of the McKim court. In the soffit of the big coffered arch the coloring of the panels has flattened the effect and turned the magnificent Travertine stone into paper. The red-colored coffered ceiling gives a chalk-like effect to the stunning murals which flame with wonderful color when seen without the accompaniment of "architectural" paint. The sense of reality, of permanence and stability, is preserved in the lower part of the tower. The treatment of the main cornice of this portion is a dream of color and in no way detracts from the stone effect evidently desired.

The Court of the Sun, Moon and Stars, by McKim, Mead and White, a composition of which the Tower of Jewels forms the crowning member, is the architectural *piece de resistance* of the exposition. This magnificent architectural spectacle, composed with delicate fancy and rich accompaniment of conventional ornament and bas relief, has been but slightly jarred from its original supine calm. The deterrent color notes and groups of too assertive statuary can hardly be said to mar the effect as a whole. The stirring groups of statuary which surmount the main architectural features, and which are supposed to announce themselves as the concentrated essence of the thought as proclaimed in the court as a whole, have been colored a light brown. This simply has the effect of relieving the pedestal of their weight. One wonders, how far back? It is quite theatrical, this shifting of "scenes," of planes.

The floor of the court is "furnished" with statues and fountains, whose bulbous forms by their proboscis-like effront-

ery push to insignificance the gentle grace of the inclosing colonnades. These sweeping colonnades, like a picket fence, inclose great colossal, recumbent figures which oppose their giant limbs athwart each vista of the eye, and shrivel to an inglorious dissonance that which would otherwise be an architectural symphony. The interest originally attaching to the elegantly modeled frieze has, through the use of a delightful color magic, shifted to the cornices and openings. The color detail one must pronounce as being at once elegant, naive, and satisfying. The pristine glories of classic lines and classic figures which, in fine repose, are set to enrich and enliven the friezes, are dulled by comparison with the yellow statues, nearby, which, like giant incrustations, flatten themselves against the walls. Painted pilasters skip up and down the dignity of Travertine stone piers.

The glorious sculptured group by Isidore Konti about the pedestal of the great column on the axis of the court is stolen from the view by a "smashing" bit of colored kiosk-like band stand, which, like an apple woman in Broadway, unprofitably obstructs the traffic of the eye.

No greater Roman holiday was ever made than this. Shades of Stanford White stalk nightly in this wonder place, where the gemmed star maidens look down on dusky sisters clothed in Oriental sepia. The dead spleen of Vitruvius should gather grit to see so lordly a scheme go through the color pots. Yellow domes atop these classic piles proclaim against the cerulean blue in unmistakable paeon, "Who did this thing?" Undoubtedly a paint pot flew into the sky.

And yet the color glories of the whole proclaim a pace so spent for beauty that one halts to ponder. "If this could have been done at its best, it would have outdone itself and placed a ban on future accomplishment."

In pleasing contrast to the evident loss of scale and force in the supposedly crowning feature of the architectural composition is Mullgardt's superb court —the Court of Creation. This work was originally intended for a riot of color. The application of pigment has been

eliminated. The result is that the work of the artist is left in its unrivaled beauty. This court is a true dream in exposition architecture. The detail counts for all that it may; the architect's thoughts as expressed in mass, line, detail, announce themselves in unmistakable terms, unfoiled by deterrent color.

In any architectural composition there must be some reposeful element, some undetermined zone of emotion from which the thought-directing element must spring or be evolved. The unbroken wall surfaces, whose texture and substance are left to the imagination, carry in forceful, purposeful manner their just weight in the composition.

In the court of Mullgardt the pure undivided over-grey of walls and ornament alike holds in solution the dominant thought. A delicate tracery of detail, which by its disposition and its charm of form leads the imagination on, is pregnant with the abstract thought in the artist's mind. This court, of all the work in the exposition, expresses most definitely perhaps the untrammelled vital spark of originality. In the modeling of the architectural ornament one intuitively feels the influence of the architect's master hand. The sculpture, however, particularly the main tower groups, lacks contact with the architecture. This sculpture is less colorful, less dynamic than the adjacent architectural ornament. It also lacks subtlety, fineness and refinement, and fails decidedly to express the same suppressed electric grotesque quality which is announced with such good effect in some of the less important groups. The sculpture, though plainly less vocal than the architecture, is decidedly interesting, well composed and powerful. It might well be deemed a crime to mention this lack of correspondence, for there is evident sincerity of effort and a much greater correspondence than we find in many works of greater prominence. The lack of a certain kindred spirit, which only a Mullgardt sculptor could evolve, is hardly a reasonable lament.

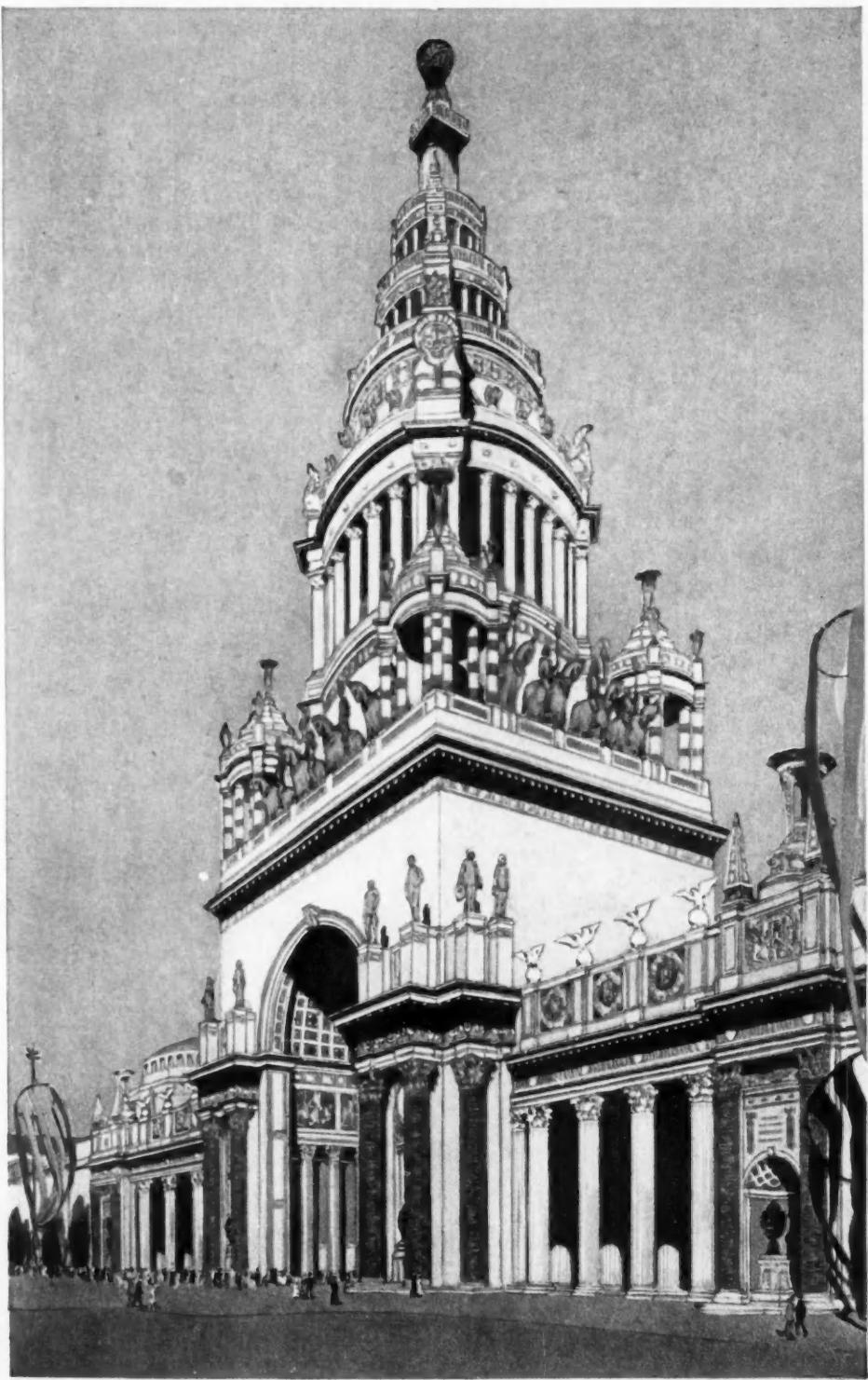
The central fountain by Aiken in this court is well worth while, considered by itself, being rich in imagery and beauti-

fully composed, but too large in scale and in mass for its place in the composition. Its effect is to dwarf the court as a whole. Only when this note is out of the line of vision does the full beauty of the place appear.

The wall decorations by Brangwyn at the ends of the corridors are masterpieces of wall decoration, fit counterpart of this gloriously vivid individual work. The color of these glows like burning coals. They serve to vivify the idea that from subterranean fires where colors leap and play; from the earth and air and sky and sea where eternal forces are locked in titanic struggle to be free, the Court of the Universe comes forth to greet the eye in a festoon of tempered, controlled, vitriolic lava, formed and fashioned into a bit of architecture lurid with a soul's delight in creation.

The superb handling of the murals in Mullgardt's court suggests a word in general as to the relation of murals to this matter of "Color in Architecture." A mural painting should be what the term implies—"on the wall." As in the work of Puvis de Chavannes, one should feel more of wall than of color, more of structure behind than of forms represented. In the color scheme of the whole a mural may or may not count as a dominant note, but at all times should be subservient to the wall feeling and in harmony with the general color scheme. In Brangwyn's painting one could consciously feel a desire to know the jointing of the stone work in the wall, in spite of the rich tonal effects, so flat, so secondary is the plane or perspective element.

The mural decorations of the exposition are in the main alive and graceful, teeming with rich imagery and full of clear color. But in the color scheme they count merely as jewels, resplendent with color, like ripening fruit; they are not (with exceptions of course) murals, on walls; they are merely bits of bright color, little elfinlike butterfly bits of color in a pageantry of blatant color which asserts itself in blobs and chunks. For in this color composition huge areas, heavy with color and in values which dominate, stride like giants beside the sea and throw themselves into the air. Dank with the

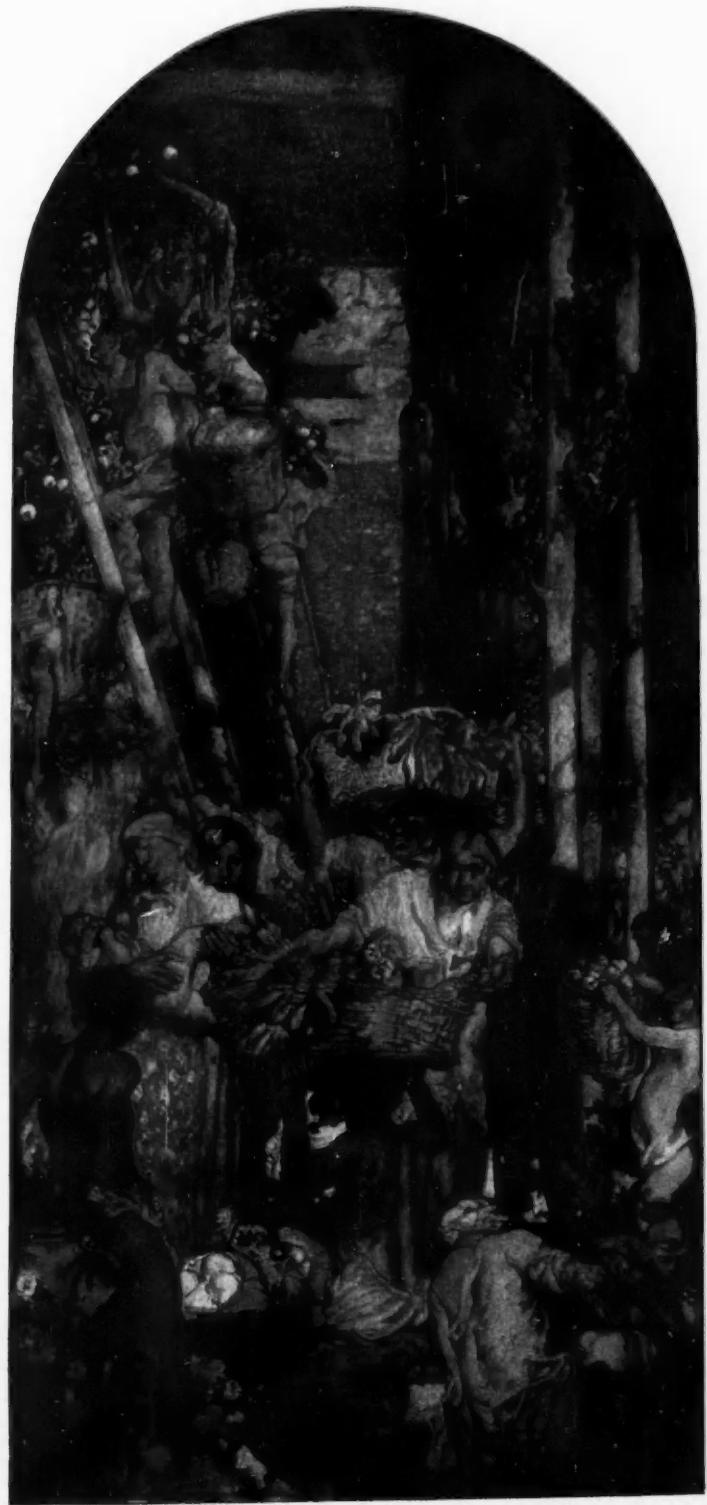


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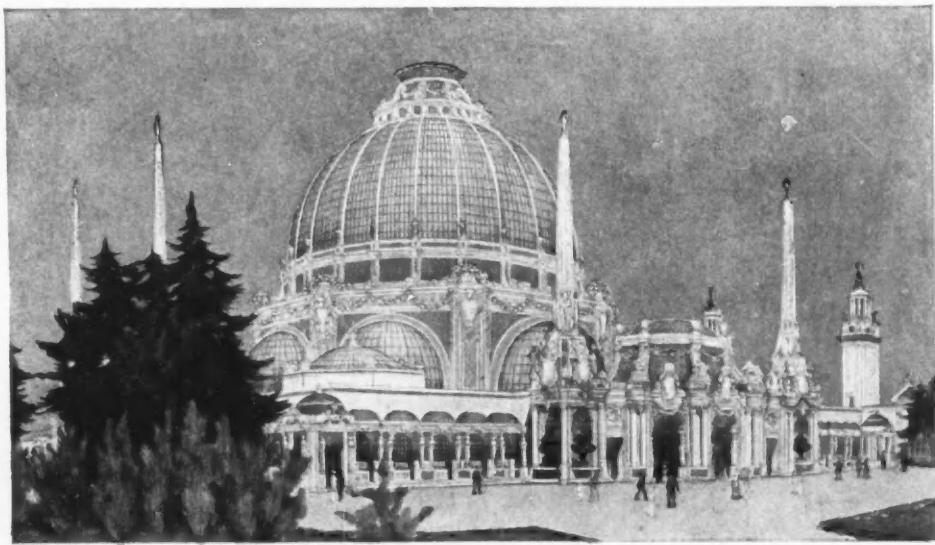
THE TOWER OF JEWELS, PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.



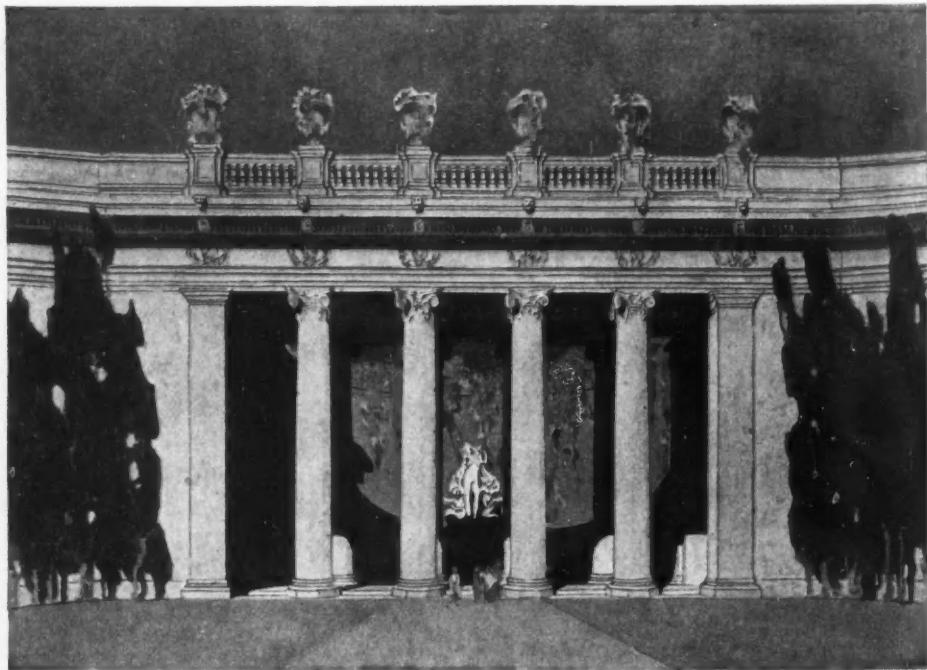
"DANCING THE GRAPES"—PANEL BY FRANK BRANGWYN,
PANAMA-PACIFIC EXPOSITION.



"THE FRUIT PICKERS"—PANEL BY FRANK BRANGWYN,
PANAMA-PACIFIC EXPOSITION.



THE PALACE OF HORTICULTURE, PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.



NICHE IN COURT OF FOUR SEASONS, PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.

stress of the painter's palate and mellow with the age that obliterates even a semblance of the thought behind the forms, this blazing beauty of color is rampant, a carnival of the "Painted Desert," a morass of voluptuous symphonies of color, the expression of a mind drunk with color. What a powerful pile this would be were there an architecture to hold it, bind it together, hammer it down, "put it over."

However we may be impressed with the effect of color in architecture, it still remains that architecture is fundamentally a structural vehicle. The color element as an emotional impulse must be subservient to the thought directing element as expressed in the architectural form. Where the color element is powerful, the form element must be still more powerful, else we have, as in the characteristic work of the futurist, dominant emotional impressions, unknowable efflorescence in color.

Taken as a whole the exposition must be deemed an expression in color, without adequate architectural accompaniment. The details of beauty which crowd upon the eye at each step do not affect the general value of this statement.

As an instance of a happy detail we note the Horticultural Building. This work of Bakewell and Brown's is a *tour de force* in exposition architecture. It is without exception the most electric, the most expressive, effervescent playful bit of joyous architecture. In the main it expresses, in its color, a most wonderful and delightful restrained exuberance, and the atmospheric quality is charming; but the color imposed has in places converted the detail to a lavalike deposit of unmeaning forms. The choice detail—the fanciful lines, the luxurious efflorescence, particularly of the lower portions—is swallowed up in the pastel vapors of a too dominant color fancy. In this building the dominant note is the great glass areas, which reflect in opalescent bluish tones the prevailing moods of the day and night. The architectural forms are handled with a suggestion of the jeweler's art. The construction and the setting of the various parts in adequate structural relation are graceful and free.

Here the structural aesthetic values of architecture are rightly subservient to purely decorative features, the structure being implied. Yet so cleverly is the whole conceived in the spirit of glass and iron and ornamental paste that the mind is satisfied, while the emotional appeal is more than satisfactory—it is a joy. Viewed from the portals of Bacon's court, this building is a jewel of jewels, the quintessence of voluptuous, sumptuous, contained joy.

The primary relations of structural aesthetics, even in exposition architecture, are dominant factors. A more or less close following of reasonable structural values is necessary. As an illustration of misapplication of values, we note the great even-toned greenish domes, which are a dominant minor chord in the scheme. These domes top perforated drums whose wall surfaces are treated with color in a broken design. Here we have a case of syncopation in values. The even color of the dome suggests a monolithic construction; the drums, broken up by bands of scintillant mosaic color areas, suggest a wall of a purely decorative character. To have preserved the effect of solidity of the wall and broken the roof, would have been a way of handling the situation more in accord with the common understanding of the likely structural condition. Or if the solid character of the dome was an important note to be preserved, why support it on a member which by its treatment suggests a more transient type of construction? Under the present arrangement we see the strong shadows of the perforations entirely surrounded with opalescent color conditions, resulting thus in an unexplained structure. The effect is of spots of dark hanging unsupported in the air; the color values of walls and dome being commensurate with the sky values.

Turning to more prosaic details, one's eye lifts to wide expanses of livid ornament, suspended like giant tapestries before the walls of towers which flank the Court of Flowers. Here we confess ourselves ignorant of the meaning, and our powers grow faint before the wizardry, the "wine of wizardry," of the painter's

palette. Here it is difficult to arrive at the point of view of the colorist. A few questions will elucidate. Why, for instance, has color been applied on stone, on exterior wall surfaces, particularly in a diaper pattern, in a way that suggests oilcloth or a brick texture? Great expense and care and skill have been exercised in imitating a stone texture; and are these not stone forms which are employed in adjacent ornament? Why have these suggested surfaces of stone been destroyed as such by the coloring of supposedly stone details? Why has the illusion of stone, of permanency, of stability, been frustrated? Is it more important that a composition be colored than that it be true to itself?

A natural sequence of thought in architectural composition demands that the voids find expression in terms corresponding to the wall structure. When this is not done a manifest confusion in the abstract idea results. Why are the ornamental openings colored so that they suggest beautiful masses of terra cotta or brick or plaster, and the wall areas next treated to suggest Travertine stone?

The value of a wall surface, either expressed in flat unbroken areas or in its extreme phase of fenestration, a colonnade, must ultimately reside in static qualities, its capacity to carry. Why paint a stone wall pink? Are there any pink, real pink, face-powder pink, stone walls anywhere? And, if there are, do we need them here?

Whatever of decoration in color is used on a wall, the quality of stability and permanence should manifestly not be abased. And the detail in color should synchronize in character with the supposed wall material. A stenciled decoration on a plaster wall which has the texture and color of stone, and is supposed to look like stone, should be stenciled, if at all, to recall some sort of stone decoration, and not in imitation of the texture of a brick wall or of a plastered surface.

A wall is primarily the reposeful element in an architectural composition. When a decorative effect is desired in a wall, the wall surfaces should still indicate more of repose than the local dec-

oration of the voids. A highly decorated wall surface having a high key of color value must fail in its structural value as a wall, i. e., a carrying member, unless it is subservient to still more colorful active interest producing elements at the openings. The openings should be accented with ornament, powerful, impelling, thought-directing, of sufficient force to dominate the color condition in the wall.

Because the architecture of the exposition has been designed by men for the most part necessarily without the superlative color sense of a Guerin, the architectural forms express less of activity and power than the color phase. In general, the main architectural lines of the buildings and the minor forms and the details have, through the juxtaposition of the color of applied pigments, dwindled, shrunken and become enfeebled by the contrasts thus imposed upon them. The abstract message of the architecture is submerged in the emotional power of the color values with which they are surfeited.

This brings us to the idea of the true relation of color to architecture. Color in architecture is not the end; it is the beginning of an architectural composition. Color is the reservoir, the ocean, the garden, from which must spring the bud and flower of the architect's thought; just as in literature the thought is more important than the verbiage with which the thought is clothed; as in music the theme is more important than the rendering of the tone values; and as in sculpture the abstract quality is more important than the vehicle.

Color in architecture signifies not so much the covering of architectural forms with pigment, or the use of highly colored materials, as it means that fine adjustment of shade and shadow which suggests color. To him who is sensitive to color a work of architecture is an arrangement of color values under any circumstances.

Comparative views of the buildings taken when they were in the Travertine stone and afterward, when ornamented with color, are, of course, only suggestions of the true condition. However, they serve to show that the application of

pigments which darken the general effect tend to destroy the direction and force of architectural detail. It would, therefore, appear that the colorist should be the architect, or *vice versa*, in order that the color values should be nicely adjusted to the architectural forms.

Paul Bartlett, the sculptor, once said in one of his classes, "A great artist could make a thing of beauty of an elephant, even though he had never seen an elephant and knew nothing of its anatomy," illustrating that the poise and swing of line, the balance and power of composition, were aesthetic powers within the scope of the sculptor and superior as elements of expression to mere details of fact in anatomy. And undoubtedly a master in color, such as this magnificent spectacle proves Guerin to be, may have the power to compose a wonderful composition in color, using as his canvas the buildings and entourage of an international exposition, without a specific knowledge of architecture. But are we not entitled to expect more than a color composition, just as in an equestrian statue we expect the saddle girts to be in place, no matter what the charm of rendering otherwise? In short, we should expect to find not only color in all its glories, but an unrivaled display of fine aesthetic values of line and form as well. And we are justified in looking for a harmony of these various elements, which, combined, constitute the art of architecture. That we do not find this balance is explained only by the fact that no one personality was available who combined all the qualities of an architect.

In the results before our eyes not a single titanic form announces itself, not a line in electric, elastic vehemence cleaves the sky without deterrent color accompaniment. No profile as such feels its way into the mind as a line of beauty, no group of statuary pulls itself into volcanic activity to proclaim its sculptured message—all is under the exotic pall of color. The charmed curves of Corinthian capital and the stately fluted columns stand rank on rank, flattened like colored paper strips set against other colored paper backgrounds.

There are exceptions to this general

sacrifice of architecture on the altar of color. In the Court of Seasons whilst looking out toward the sea between Bacon's titan columns, which in solemn grandeur proclaim the dignity and beneficence of nature's bounty, one notes the lilt and lift of the graceful statue of Miss Longman in splendid joyous abandon—a bit of beautiful line in silhouette against the sky. The contrast of this statue with the vistas of advancing ranks of the columns on either side is altogether fine. Here is a picture of classic repose, undefiled by more gorgeous counterpart than that given by earth and sky and sea. This Court of the Seasons, its pavements unbroken save by the level waters of a green bordered pool, stands alone as being free from unsympathetic treatments of its garden areas. Except for the great central apsidal feature on the main axis, which protrudes a foreign note where Faville's door and apse form the enclosing feature of the great central arch, the court stands complete as its architect conceived it. Here the Travertine stone dominates the color scheme. Occasionally where color has been applied, as on the ornamental wreaths, giving an effect of stencil or intaglio, the values of the architect have been frustrated. The sculptured groups of this court are in harmony with the solid dignity of the architectural forms. Many will feel that this court is more nearly a complete expression of mature classical thought and feeling than anything in the exposition. Certainly it has repose and dignity, and great charm—beautiful proportions and the absence of unfriendly color dominance.

One other line of pure delight there is which, like the statue in Bacon's Court, must live in the memory. It is the en-tasis of the columns in the colonnaded porches of the Pennsylvania building. We met this line just after passing through the fiery furnace of color which encompasses the Art Palace. We had just said "good bye" to the lovely Greek ladies, who turn classic backs upon our upturned faces, and to the cool, refreshing, satisfying walls of the California Building, when looking past the elegant refinement and opulence of New York,

we met some old friends—Independence Hall, the New Jersey Building, and the State House of Boston, and others. Greetings, ye gentle reminders of the Colonial age! The fine grace of these simple lines, these forms unafraid to dare the blue of Western skies in the garb of ancient renown, greets our eyes now surfeited with color. Like a sweet message of ancestral days these delightfully frank architectural fragments bring a realization of our real self. These declare our time and temperament; these, our race and religion, our birthright, and perhaps our future. The exotic fulminate of riotous Roman architecture and "Cairo" coloring possess us no more. We pass as in a dream into the calm realization of the old gold dome of the Boston State House, and we ask the question, Is it the ideals of Patrick Henry and of Hamilton and of the Adams family and of Franklin, or is it the lure of the Occident, the voluptuary, the sensualist, the occultist, and the seers and precepts of the East—the "line" or the "color"—which holds us truest to our ideals? Go and sit beside the fires of Brangwyn's pictures amid the calm of Creation's Court, and think a while, then out by the sea, alone beside these landmarks of your ancient home. The tides that wash on Pacific shores wet now the feet of the Pilgrims' sons. Are the eyes of these sons lifted to the prismatic colors of the Orient or are they stayed by the subtle beauties of restraint? Or do we look for a future day when into the old shall have been breathed the breath of the new, when these Eastern fires shall have been tempered, when these exotic flashings of emotional energy shall have been curbed by the steeled minds of the West, and chilled into finely wrought expressions of a superman.

Return again to the Court of Creation and there you will see more nearly than elsewhere in this forest of pageantry a

realization of a dream come true—Brangwyn's pictures and Mullgardt's court. Here, a true blending of Eastern spirit with Western restraint, of Southern color with Northern lights, a medley vocal with the churning together of rival races, of strident woes, a light from the burning torch of progress.

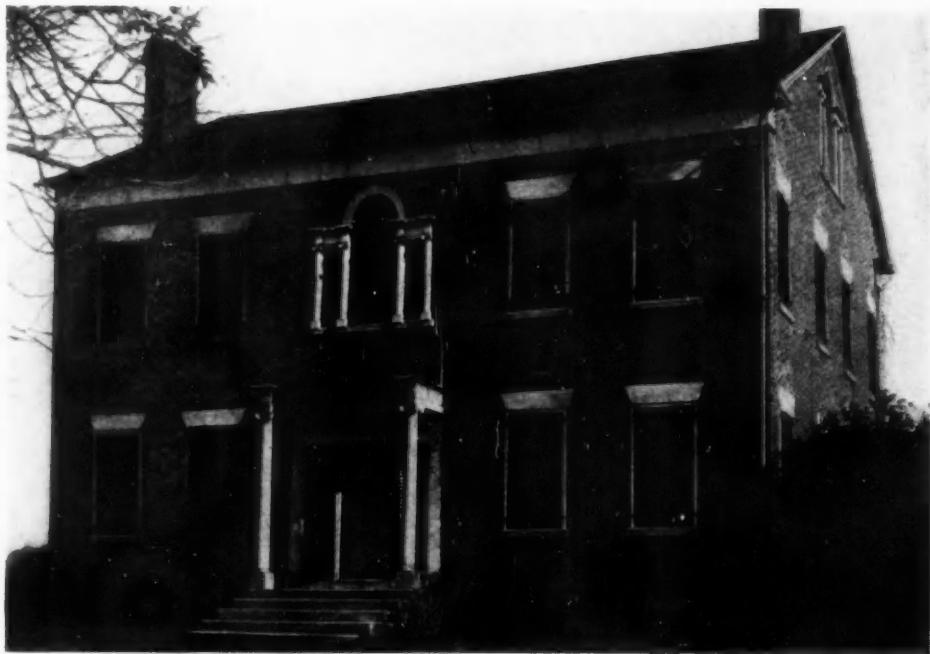
For this alone the entire effort of the exposition is worth while, for this work signals a spiritual growth, an aspirational force, a capacity for expression in the abstract.

Of the work of Jules Guerin it may truly be said that, whilst his work has been Goliath-like in that he has brought the temples of beauty down about our heads, he has nevertheless given the world the greatest demonstration of the uses of color in exposition architecture with which our time has been favored. All the compliment which word could convey for the boldness and sincerity and harmony of his work is due.

The structural aesthetics of color, still veiled and sphinx-like, awaits the advent of architects who are colorists. Stanford White thought in color, by the way, and his work is the proof.

However immaterial and irrelevant criticism of a work so generally lovely may appear, we are bound to recognize in each advance step in art a stepping stone to something greater. This work in color at the exposition seems to presage not only a wider appreciation of color in its application to architectural problems, but a demand on the part of the public for a more precise knowledge of the use of color by architects.

The day is not far distant, we feel, when the architect shall be required to know not only the law of the forms which he employs but the law of color harmony as well, when, like Michael Angelo, he shall be required to wield the brush and the sculptor's chisel as well as the builder's square.



THE NORTON HOUSE, GOSHEN, CONN. AN EXCELLENT TYPE OF COLONIAL WORK.

COLONIAL ARCHITECTURE IN CONNECTICUT

*Text and Measured Drawings by
Wesley Sherwood Bessell*



PART II.

THE Norton house at Goshen was built when Colonial architecture was at the height of its refinement, a circumstance reflected in the quality of its mouldings. The house stands upon a knoll overlooking the valleys in all directions, and was probably erected when Goshen expected to become the county seat instead of Litchfield. The country about it still retains the quiet of a primitive settlement.

The bricks for the house were evidently made on the ground. Their colors are exquisite, running from light salmon to rich dark reds, from straw color to dark golden browns, from light blue tints to dark purple and brown. The time has

gone by for such hand-made bricks, and we can hope only to approximate their beauty in our machine made product.

The cornice of the house is well proportioned, and very carefully ornamented by means of slight sinkages and cutouts.

The treatment, in relation to the house, of the living porch, with its row of two-story columns and stone flooring, cannot be too highly commended. Why not try something of this character to-day instead of our weak solution of this problem? Modern porches never seem to be a part of the house, but an afterthought.

The two houses at Litchfield, the Butler and the Tallmadge house, also show the way for a quaint and honest handling



THE TALLMADGE HOUSE, BUILT IN 1775, LITCHFIELD, CONN. THE FRONT DOOR IS OF LATER DATE.

of the question; their porches are a part of the house, a part of the whole design, and are very pleasing in appearance. In both instances the porches were added after the house had been built. Col. Tallmadge erected his after a visit to Washington at Mt. Vernon; the porch on the south end was built first, later the north one was added. The south one contains three columns on the side and is of a greater depth than the north one, which has only two columns. The space saved gave more room inside for a closet which contained a small stairway to the upper room, the opening and markings still being traceable.

The Tallmadge house was at one time a tavern, and the south end was the office. One large room upstairs was used as a ballroom, running through the house on the north side. It has since been changed into two rooms of a goodly size. Unfortunately, the present front door is not the original one, but it is said to have been similar to the one shown in the drawing of this house published on page 360 in the April number of the Architec-

tural Record. The handling of the roofs of these additions in connection with the main house is unique, and worth studying, as is also the balustrade on the roof.

The Butler house likewise solved in a very pleasing manner the question of the porch, which also is a later addition. The deliberate manner of placement relative to the main house is much to be admired. We are afraid to do a thing of this kind to-day, simply because of some biased criticism; we lack the moral courage of our convictions, and, I am convinced, allow many charming ideas to go by. Here the face of the columns extends beyond the face of the main building, and the cornice is let die into the old house at will. The detail is refined, and shows that careful study was given to the execution of the work. The house proper was built in 1792 by Charles Butler, and the addition early in the nineteenth century.

On this same street and in the same town of Litchfield may be found numerous old Colonial homes. Just above the Tallmadge house is the old Sheldon Tav-

ern, now a private residence. Entirely different from the houses mentioned above, it was built in 1760 and shows decided earmarks of English influence; but it is more refined in detail than the majority of houses in which English ascendancy is felt. It was built by Elisha Sheldon, and it was not until the next generation that it became a tavern, run by the son. Later here also lived General Uriah Tracey, and still later Judge James Gould, famous for his work known as "Gould's Pleading." The mouldings of the cornice are coarse and heavy and out of scale with other details on the house, but here we have those charming dormers of an attenuated feeling so seldom seen, the jambs being only of a width necessary for construction. The roof line shows a marked change from the general type, but still is rather desired than otherwise for the balance of the design.

Almost opposite is the Julius Deming house, built in 1793, and designed by Wm. Spratt, a Scotch architect, wrongly thought to be a Hessian. This house

is similar in design to the Sheldon, but decidedly coarser in detail.

A very good and simply designed house is the Seymour homestead, built in 1807 for Ozias Seymour, and one could ask to-day for nothing more desirable; with the application of a more delicate or refined balustrade and cornice this house has a quality not to be lightly passed by.

The Reeves house, built in 1773 by Tapping Reeves, brother-in-law of Aaron Burr, shows another treatment of the roof problem very seldom seen. We cannot say it is good, but there is the very excellent treatment of a wood grill in the frieze of the main cornice, used as windows and ventilators for the attic floor. The porch and addition on the side are of a later date, and, as before stated, it is difficult to obtain a picture of the house as originally designed.

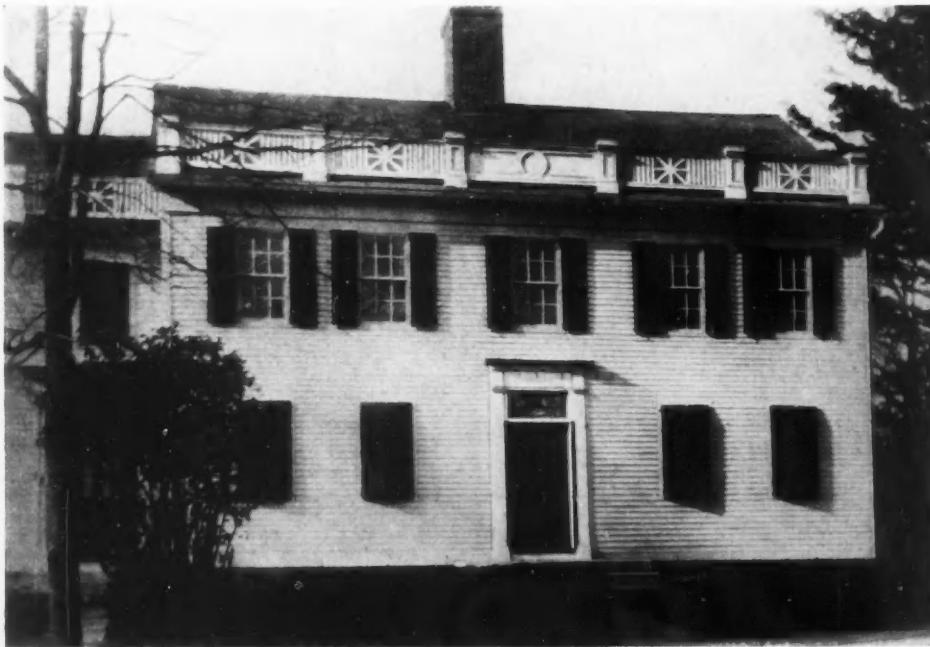
The bank building at Litchfield is of merit. By a close study of the cornice and pediment one notes the alternating circular and rectangular raised panels between the triglyphs, also the very in-



THE BUTLER HOUSE, BUILT IN 1792, LITCHFIELD, CONN. A FINE EXAMPLE WHICH SURVIVES IN ITS ORIGINAL STATE.



THE SHELDON HOUSE, BUILT IN 1760, LITCHFIELD, CONN. AT THE SIDE IS A "WITCH" DOOR.



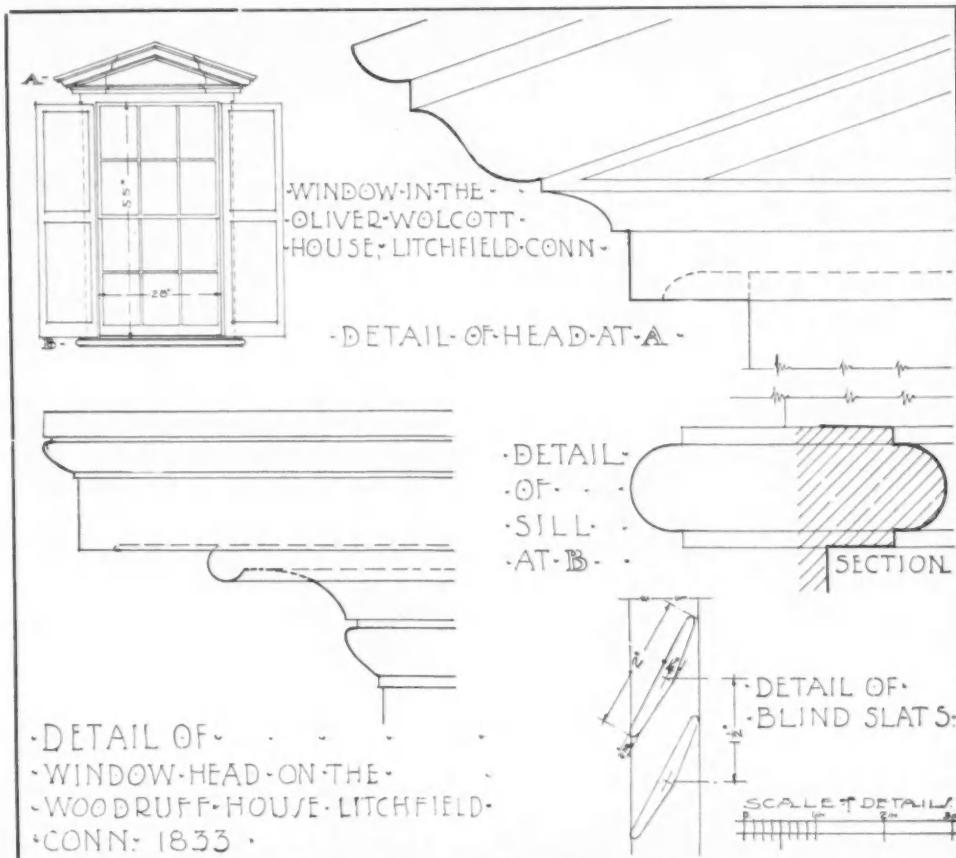
THE SEYMOUR HOMESTEAD, BUILT IN 1807, LITCHFIELD, CONN.



THE REEVES HOUSE, BUILT IN 1773, LITCHFIELD, CONN., OFTEN VISITED BY AARON BURR.



THE BANK, BUILT EARLY IN THE NINETEENTH CENTURY, LITCHFIELD, CONN.



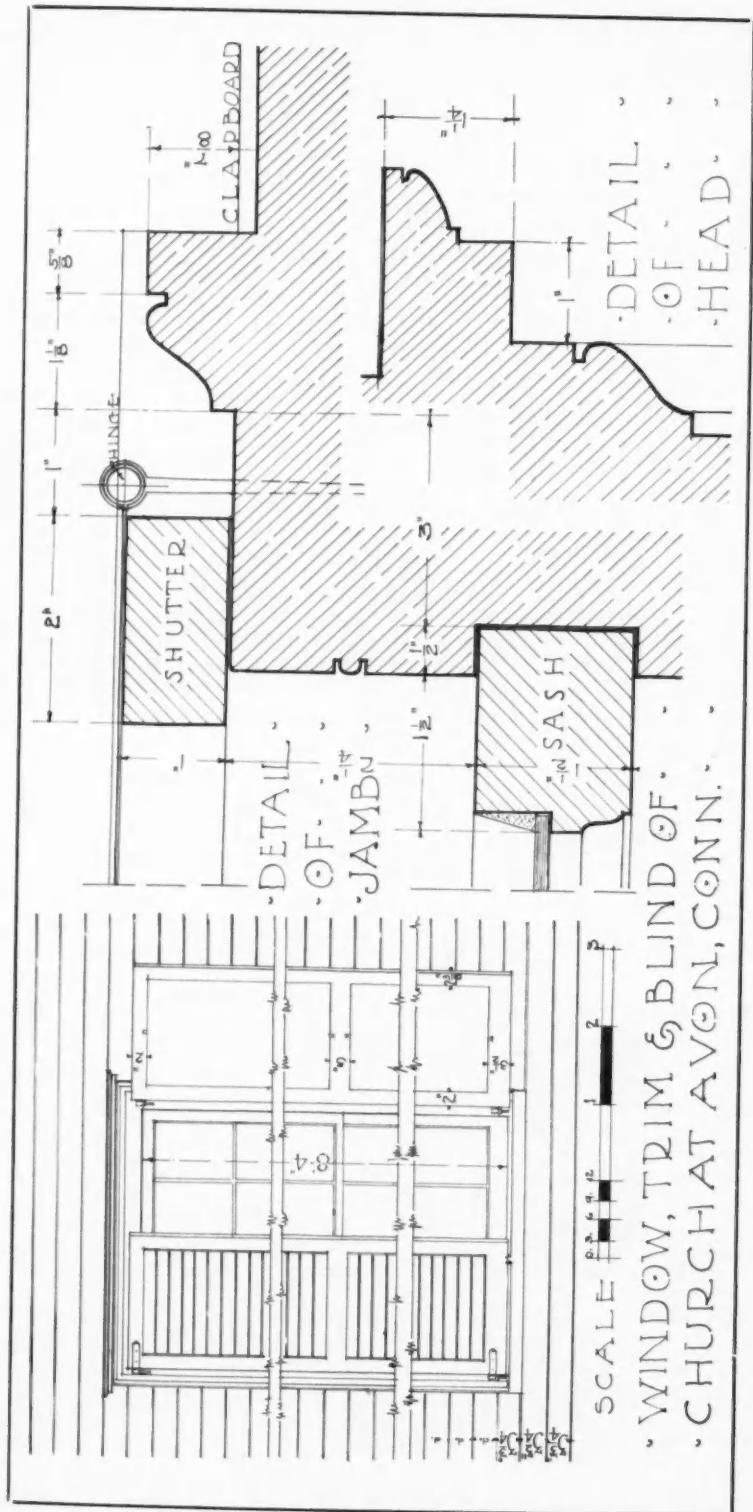
MEASURED AND DRAWN BY WESLEY SHERWOOD BESELL.

teresting motive used in the pediment for a frieze, the ornamented oval window frame and the peculiar panelling below the first story windows. Before the addition on the side was made, a quaint outside spiral iron stairway led from the ground to the second floor.

Another form of construction and design is shown by the house at Windsor, the doorway reproducing the pediment of the house, but still retaining the greatest interest. This is an exquisite door, and, together with the windows, exceptionally well placed on the facade. The fence is of a typical Colonial design, and, without the porch at the side, this composition would be well worth a reproduction today.

The Cowles house at Farmington is a large house, designed for one of apparent wealth, and yet not over pretentious. It

shows a tendency toward the southern type of Colonial architecture, something unexpected and unlooked for in Connecticut. The sloping ground gave occasion for an interesting porch treatment. The brick arches of a single brick header shows that it supports only a porch floor, the crown of the arch being almost level with the floor. The five columns are of brownstone, procured probably from the old brownstone quarries at Portland, not far distant from Farmington. The brick is at present covered with a light paint. A peculiar feature is the column in the center of the pediment, with the Paladian window treatment over this column, a treatment very seldom seen. The Paladian window is decidedly poor, but, taken as a whole, the design is good, especially the front, with a very odd but pleasing front door.



MEASURED AND DRAWN BY
WESLEY SHERWOOD BESELL.

* WINDOW, TRIM & BLIND OF
 * CHURCH AT AVON, CONN.
 * HEAD.



A HOUSE AT WINDSOR, CONN.

The construction and design of windows varied much; there are some with a full pediment at the head, some with the broken pediment, others with a full cornice treatment, and still others with just a few crown mouldings. The sashes never hung by weights, but were caught by pins let through the sash into the jamb; sashes were of the small light type, and all muntins rather delicate than coarse or heavy. Sometimes a stiff metal was used in the very small muntins. The rails were generally an inch to an inch and a half in width, the sashes themselves usually being one and one-half inches thick.

The detail drawings show three types of these window heads, and also the typical blind construction. The blind hardware varied and was often made by the village blacksmith.

Windows never were placed in double or triple formation, except as a Paladian motive, and bay windows were not used as a means of exterior or interior feature. These two facts show clearly why everything was so very simple. Limited to just single windows and a door, there would be no reason to expect anything but severity of design; but to these add bay windows and large window openings, and immediately the thing is lost so far as pure Colonial design is concerned. They belong to our English cousins' beautiful, rambling farm cottages and manor houses.

The blinds of a house add the final color touch and finish. Unfortunately, one seldom sees this feature on a modern adaptation of the Colonial doorways, and here is just where to obtain that naive quality which we have lost.

THE
NEW GENERAL HOSPITAL
AT CINCINNATI
SAMUEL HANNAFORD & SONS
ARCHITECTS
BY J. R. SCHMIDT

BEFORE plans were drawn for the new General Hospital, just opened in Cincinnati, Ohio, a commission of specialists inspected all the notable modern hospitals in the United States and Europe, with the result that the group of buildings comprising this institution, for which the city has spent nearly four millions of dollars, embodies the very latest and most approved methods of hospital construction and management. The General Hospital is a municipal hospital for the city's poor. It contains forty-two wards, employs more than 600 persons, and is situated on a tract of sixty-five acres in the suburb of Mt. Auburn, on a high plateau removed from the smoky downtown business district, but lying almost in the center of the territory bounded by the corporation line. The buildings which have been already erected are so built that the future expansion of the institution is taken care of; additional buildings may be connected up with the power plant and other common utilities as the future growth of the city demands.

The buildings already occupied are the administration building, the receiving ward, the outdoor clinic, seven ward buildings, the operating pavilion, the kitchen, the dining hall, the men's dormitory, the detention ward, the power plant, the laundry, the garage, the stable, the female dormitory, the nurses' home, and the pathological building.

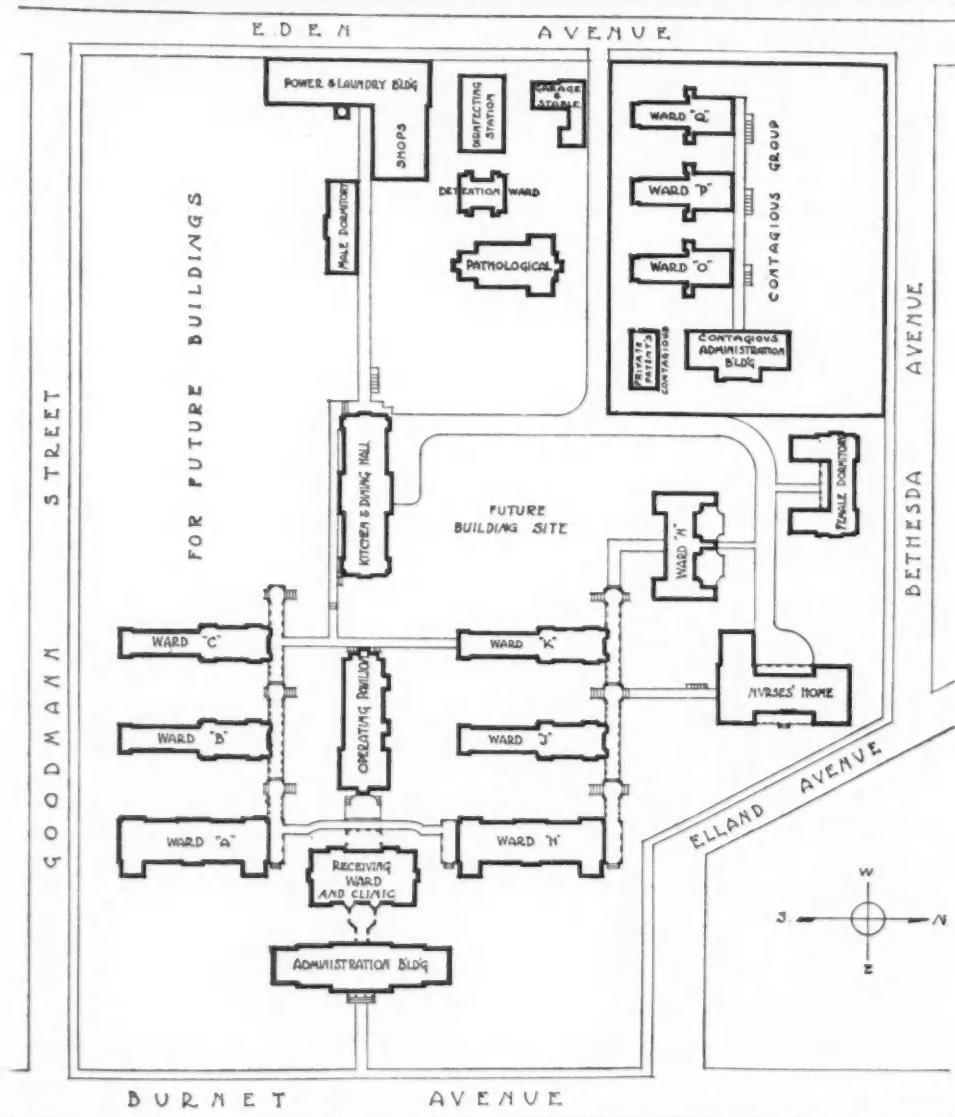
To the northwest of this main group is a smaller group of six buildings, a separate hospital in itself, where all contagious diseases are treated. In this group is an administration building, a nurses' home, a detention ward building, and three ward buildings. There is also

under way a special building where special contagious diseases, such as smallpox, will be treated.

The natural and graded slope of the land is such that the more important ward and administration buildings occupy the higher part of the site, which has about a one per cent. slope; thus, in time, the power plant, stables and garages and the like may be almost entirely screened from view from the main buildings, by proper parking and planting.

The highest point in the tract is at Burnet avenue, upon which the more important of the buildings front. It is about fifty feet higher than the west boundary, yet each building is connected with the others by an underground tunnel, so that it is possible to pass from one to another without going outdoors.

The buildings, though plain, are well proportioned and dignified. The very best of construction has been employed. All buildings are as nearly fireproof as it was possible to make them. Foundations are of concrete, waterproofed and underdrained. The exterior walls are of brick, faced on the outside with a warm, brown-toned impervious pressed brick, thoroughly waterproofed. The trimmings are of white Bedford stone. Floor and roof constructions are of reinforced concrete, and most of the floors are finished in tile, with bases of terrazzo. The details of the interior finish in every part have been carefully studied. All angles are rounded, and everything has been done to make the buildings easily cleanable. There is no interior window trim or finish around doors and windows. The base and door frames are set flush with the finished plaster faces of the walls. Door frames



VIEW AND GROUP PLAN OF THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.

are of steel, and all passageways are provided with steel guard plates set flush with the plastering.

A hot water system of heating is employed, with direct radiation. Ventilation is provided in all ward buildings by means of fans, one for supply and one for exhaust in each ward. The air is thoroughly screened, washed and humidified before being distributed in the wards.

Plumbing fixtures were made of special design. All the pipe work is of brass, and everything is so constructed that it can easily be cleaned and repaired. Plumbing fixtures are of vitreous ware, with nickel trimmings.

Realizing that fresh air is of the utmost importance in the treatment of the sick, each ward building has on its roof an open ward, where patients may live in the open. These open roof wards are provided with awnings for protection against rain and sun. They are also provided with toilet rooms and ward kitchens. All the roof wards, porches and covered ways are paved with red quarry tile; flashings and sheet metal work throughout are of copper.

The main administration building faces on Burnet avenue. In it are the offices of the Superintendent and his assistants, the main business offices, the record rooms and the quarters for the staff of physicians and internes. At the south end, on the first floor, is a large library, in which will be housed a very valuable collection of reference books. At the north end of the building is a lecture room, in which medical societies will hold their meetings. In this building also are the central telephone exchange and switchboard for signal service, which connects with every bed in the various wards, so that at all times the condition of each patient can be immediately telautographed to headquarters. Besides having this wonderful system of telautography, all buildings, wards, and departments are connected with intercommunicating telephones.

On the upper floors of the administration building will be sleeping rooms for internes and house physicians. At the south end of the second floor is a

suite set aside for the Superintendent. Recreation and sitting rooms are also provided for physicians and internes on this floor. The central portion of this building is three stories in height, while the north and south wings are two stories, with roof gardens over them for the use of the occupants of the building.

One unusual thing about all the elevators in ward buildings is that they are placed in separate towers, isolated from each other and from each floor, so that there is no direct connection between wards that are placed one above the other. This feature is carried out in all the buildings, in order to prevent any possible chance of cross-infection. The idea is also applied to all clothes chutes.

The buildings in the contagious group lie to the northwest of the main group. They differ in construction, insomuch that they are only two stories high; the wards also are somewhat smaller, having a capacity of sixteen beds each.

The operating pavilion lies west of the receiving ward. It has five operating rooms, two on the first floor and three on the second. These are connected with the etherizing and sterilizing rooms, the nurses' workrooms, etc. In the basement of the building is the big drug-room and storeroom for drugs. A complete X-ray department, with photographic dark-rooms, is also in this basement. A large amphitheater is located in the east end of the building. It is to be used as a lecture and demonstration room. It contains very large and specially built moving picture and lantern projection machines. The amphitheater is cut off from the operating portion of the pavilion, there being no communication between the two.

Immediately behind the operating pavilion is the kitchen building. This structure stands almost in the center of the group of ward buildings, where all wards may be served most conveniently. The big kitchen occupies the first and main floor. The basement contains an ice plant, cold storage warerooms, and a large space for sterilization of food boxes used by the patients.

In the power building are now located six of a battery of twelve water tube



ADMINISTRATION BUILDING—NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



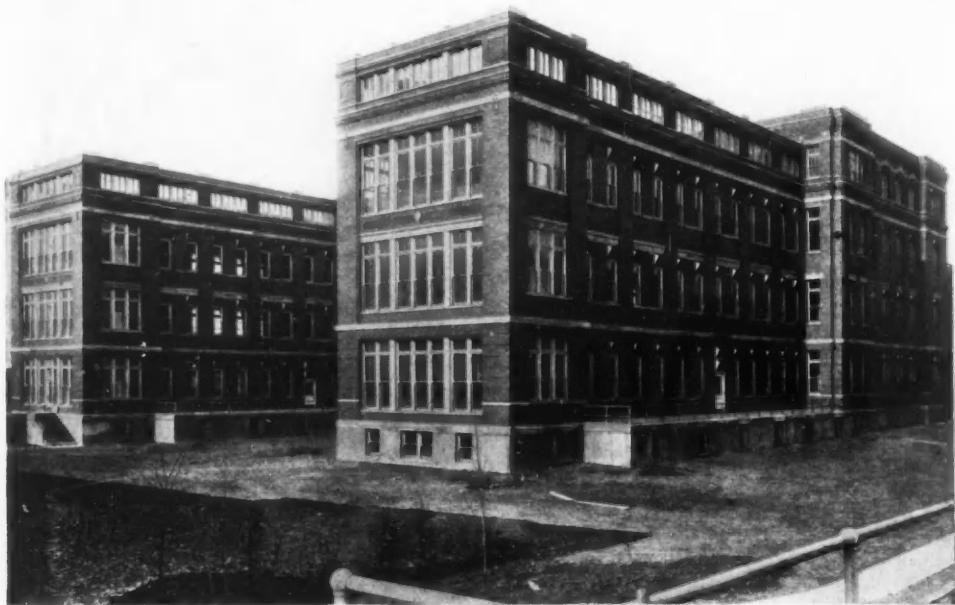
WARD BUILDING "A"—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



WARD BUILDINGS "C" AND "B"—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



WARD BUILDINGS "H" AND "J"—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



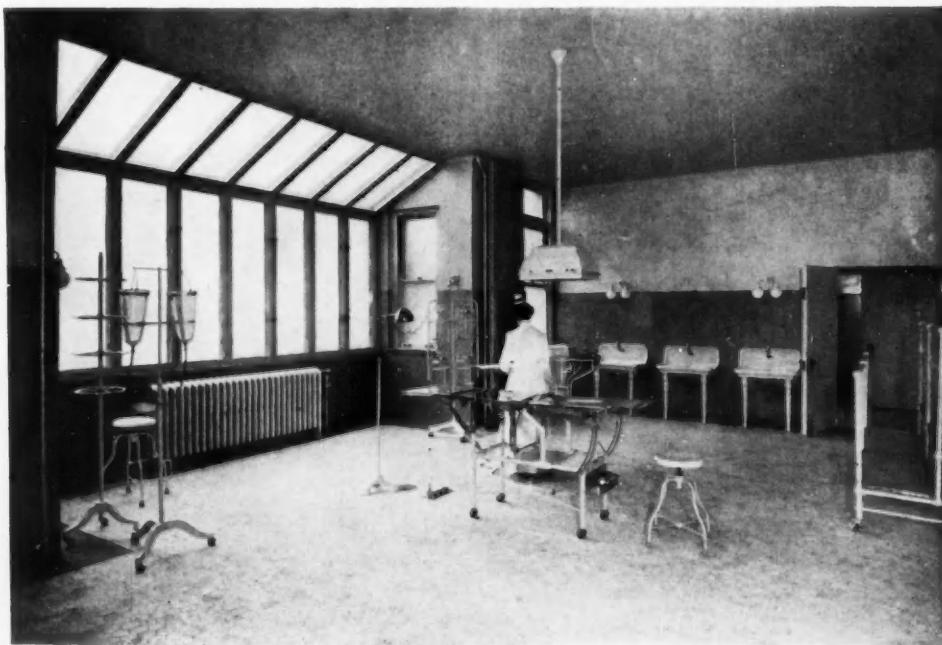
REAR VIEW, WARD BUILDINGS "J" AND "K"—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



OPEN-AIR WARD, ON ROOF OF EACH WARD BUILDING—THE NEW GENERAL HOSPITAL,
CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



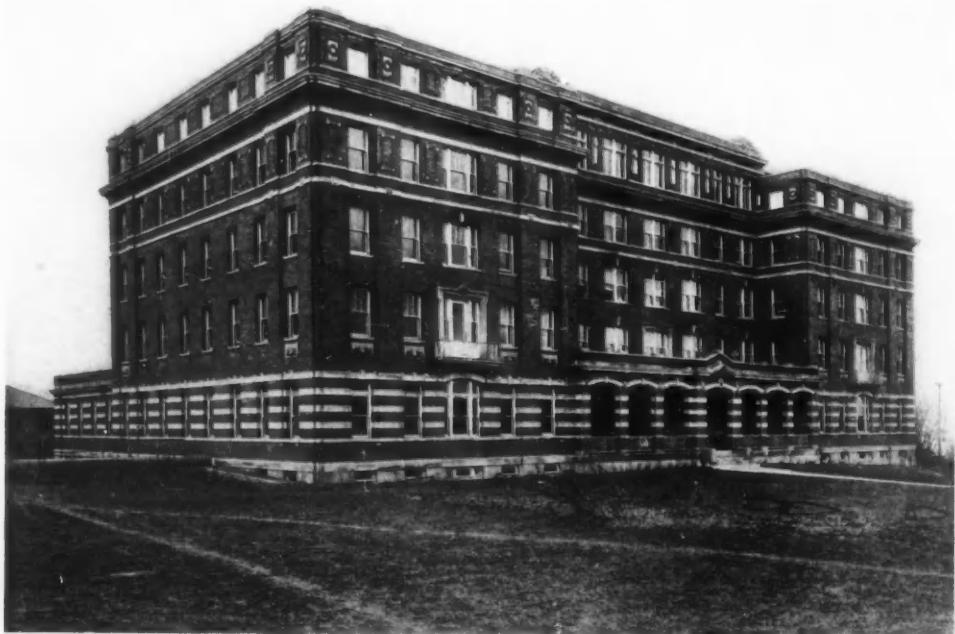
INTERIOR OF ONE OF THE WARD BUILDINGS—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



ONE OF THE OPERATING ROOMS—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



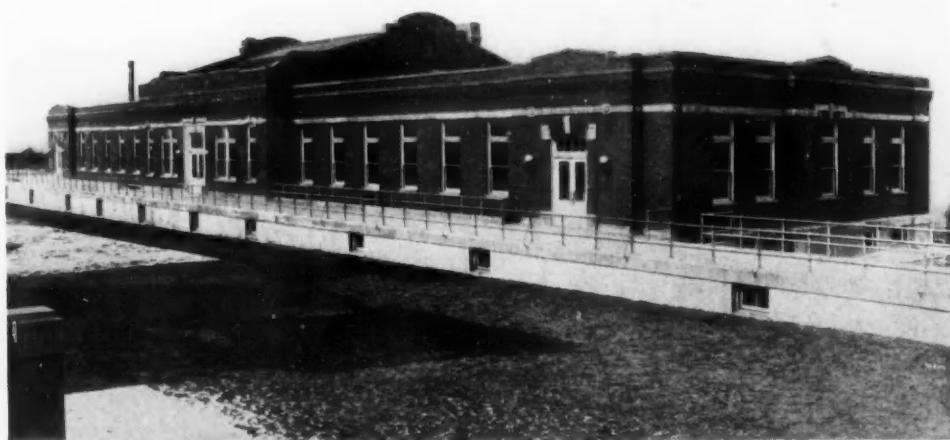
ONE OF THE OPERATING PAVILIONS—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



NURSES' HOME BUILDING—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



COVERED ROOF-GARDEN ON NURSES' HOME BUILDING—THE NEW GENERAL HOSPITAL,
CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



KITCHEN BUILDING—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



KITCHEN—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.



CONTAGIOUS DISEASES GROUP—THE NEW GENERAL HOSPITAL, CINCINNATI, OHIO.
Samuel Hannaford & Sons, Architects.

boilers of 260 horsepower capacity each. The engine room is in another building adjoining. The equipment of this room consists of three units of high-speed engines, directly connected with 250 K. W. generators. In this room are also the switchboard, the air compressor, and the refrigerating machinery. Electric current is used throughout all the buildings for light and power.

In the second story of the power house is the laundry. One-half is for the care of the patients' clothing, while the other half is for the care of the clothing of the employees of the institution. The laundry is equipped with the best of laundry machinery, modern in every respect. On the second floor of the boiler house are the machine, carpenter, and paint shops, all of which are properly equipped with machinery and supplies to care for the repair and maintenance of the buildings and equipment.

The research building lies in the rear of the contagious group and is a five-story structure housing the chapel, research laboratories, a large amphitheater where students go for instruction, operating rooms for vivisection purposes, etc. This work will be of the greatest scientific value and will be in charge of Dr. Paul G. Woolley.

Away from the noise of traffic on the main thoroughfares is the nurses' home. It has a basement, four stories and a roof garden. It is connected with all the other buildings in the group by the underground tunnel. Every convenience has been added to make the home a place of rest for tired nurses. On the first floor are a library, several rooms for educational purposes, reading rooms,

rest rooms and a laboratory for the teaching of special work. The second, third and fourth floors have sleeping rooms for the nurses. Each room has its private bath and toilet. On each of these floors is set aside a little tea room and kitchen for the use of the nurses as they see fit in preparing light lunches for themselves. There is a roof garden with a large inclosed shelter house over the central portion. Here it will be possible for the nurses to take recreation in the open air at any time. Provision has also been made for those who desire to sleep out in the open air.

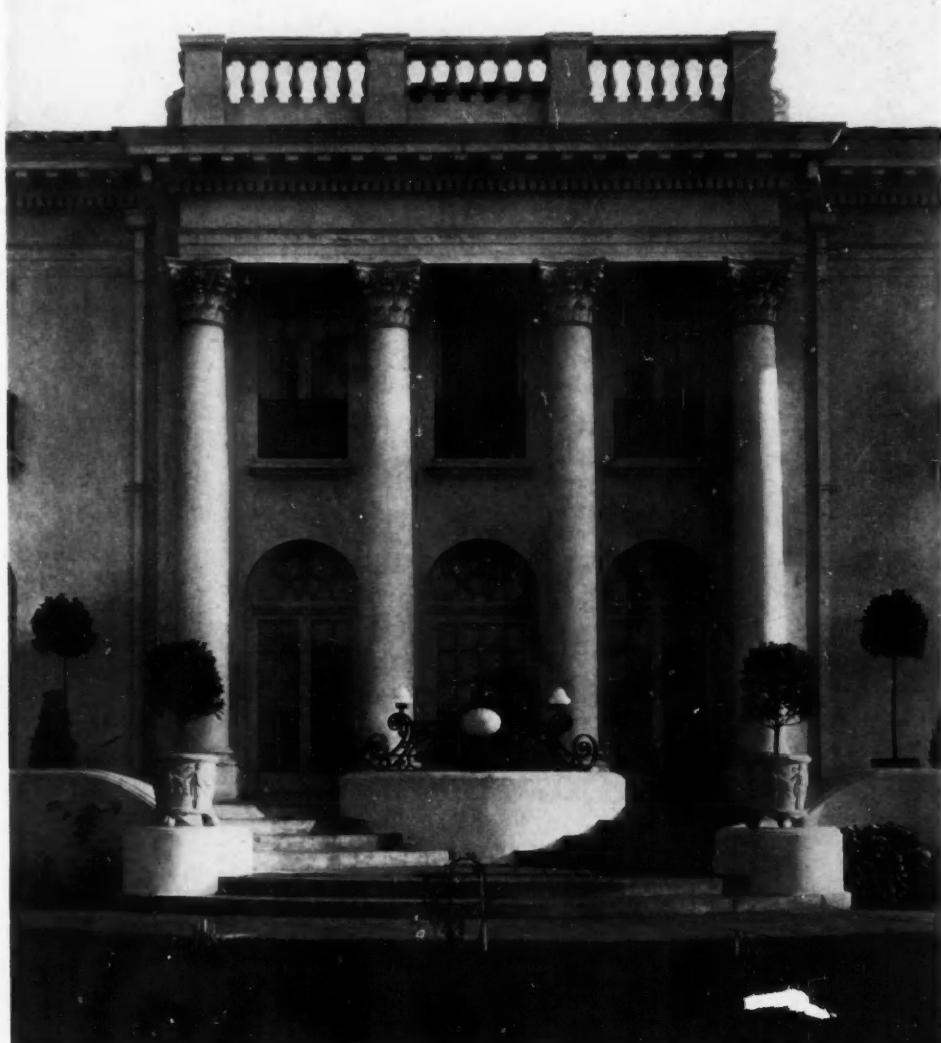
A female dormitory is located in the rear of the nurses' home. All female employees of the institution will be housed there, excepting the nurses, who are taken care of in the nurses' home. The main features of the nurses' home apply to this building, but it does not contain a separate dining-room, the occupants taking their meals in the general dining-room for employees.

The equipment of this new hospital is of the highest possible type. No other hospital is so modern, so well equipped in every detail. World renowned physicians have helped to make it the best possible hospital. The city of Cincinnati owes the success of this institution to Dr. C. R. Holmes, who spent years in the study of hospitals everywhere before imparting the information gathered to Samuel Hannaford & Sons, of Cincinnati, the architects of the institution.

The entire project of building this new hospital was placed with the hospital commission, consisting of Dr. C. R. Holmes, Mr. Harry L. Laws, Dr. J. M. Withrow and Mr. Louis S. Levi.



GARDENS—RESIDENCE OF C. F.
PERRY, ESQ., HOLLYWOOD, CAL.
B. COOPER CORBETT, ARCHITECT.



DETAIL—RESIDENCE OF MRS. LOUISE
A. DENKER, LOS ANGELES, CAL.
B. COOPER CORBETT, ARCHITECT.



RESIDENCE OF CHARLES SHARP, ESQ., LOS ANGELES, CAL.
B. Cooper Corbett, Architect.



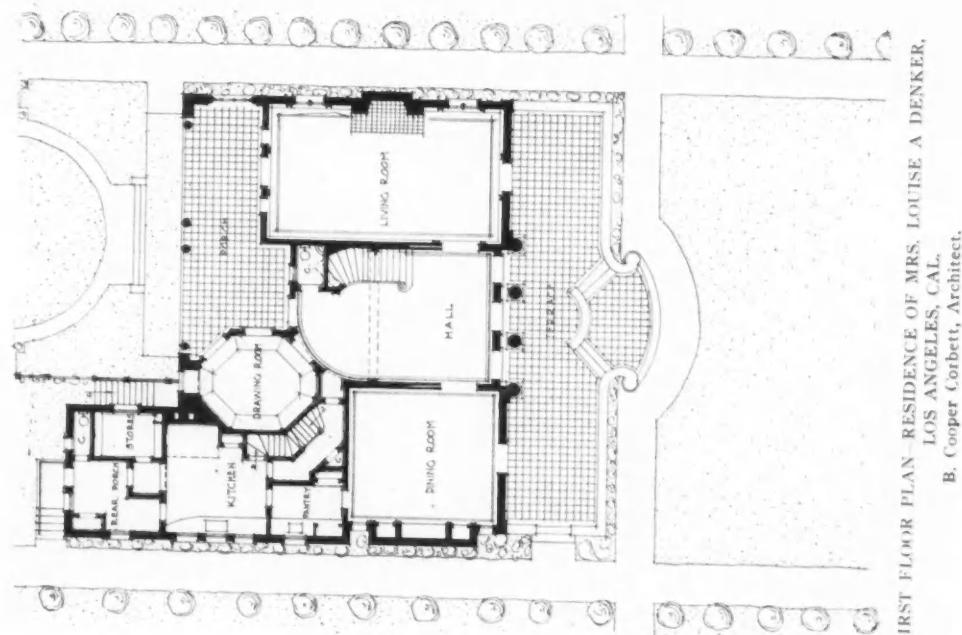
RESIDENCE OF C. F. PERRY, ESQ., HOLLYWOOD, CAL.
B. Cooper Corbett, Architect.



RESIDENCE OF MRS. LOUISE A. DENKER, LOS ANGELES, CAL.
B. Cooper Corbett, Architect.



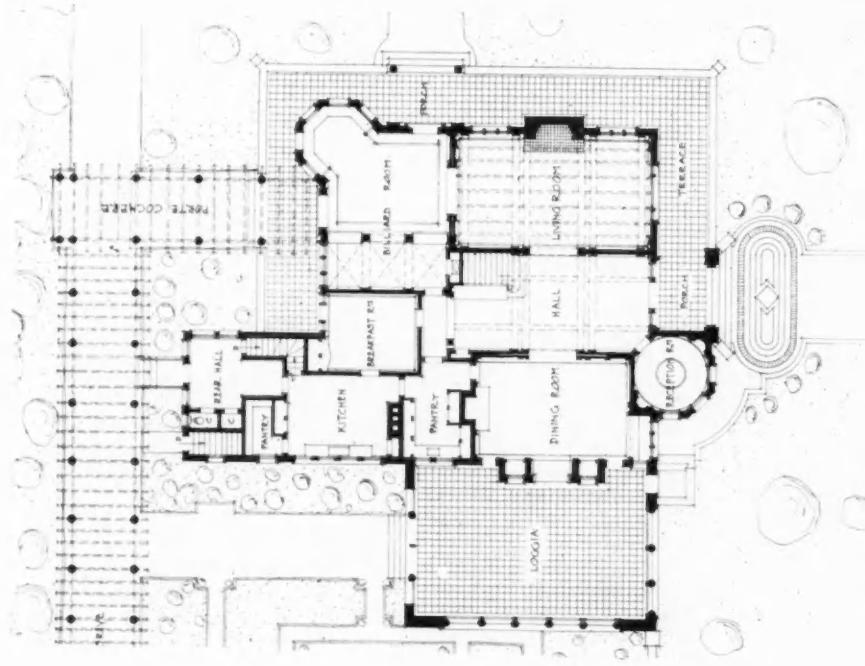
RESIDENCE OF C. WESLEY ROBERTS, ESQ., LOS ANGELES, CAL.
B. Cooper Corbett, Architect.



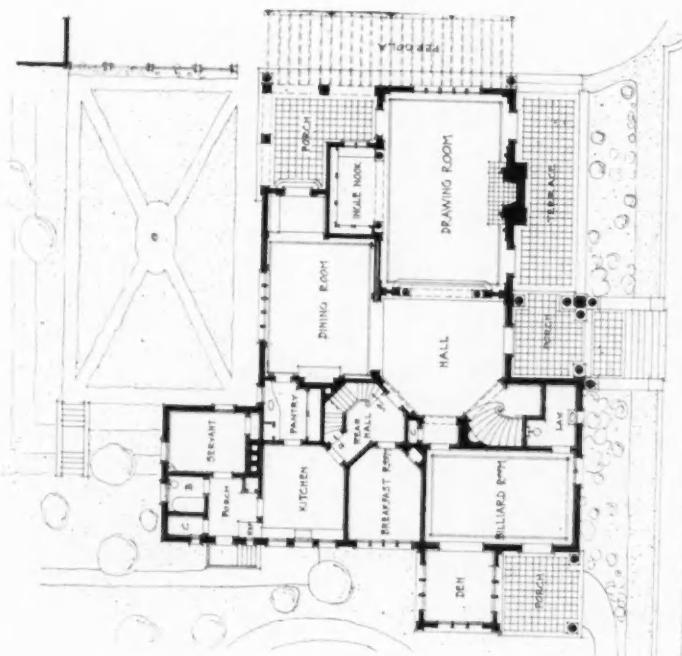
FIRST FLOOR PLAN RESIDENCE OF MRS. LOUISE A. DENKER,
LOS ANGELES, CAL.
B. Cooper Corbett, Architect.



FIRST FLOOR PLAN—RESIDENCE OF C. WESLEY ROBERTS, ESQ.,
LOS ANGELES, CAL.
B. Cooper Corbett, Architect.

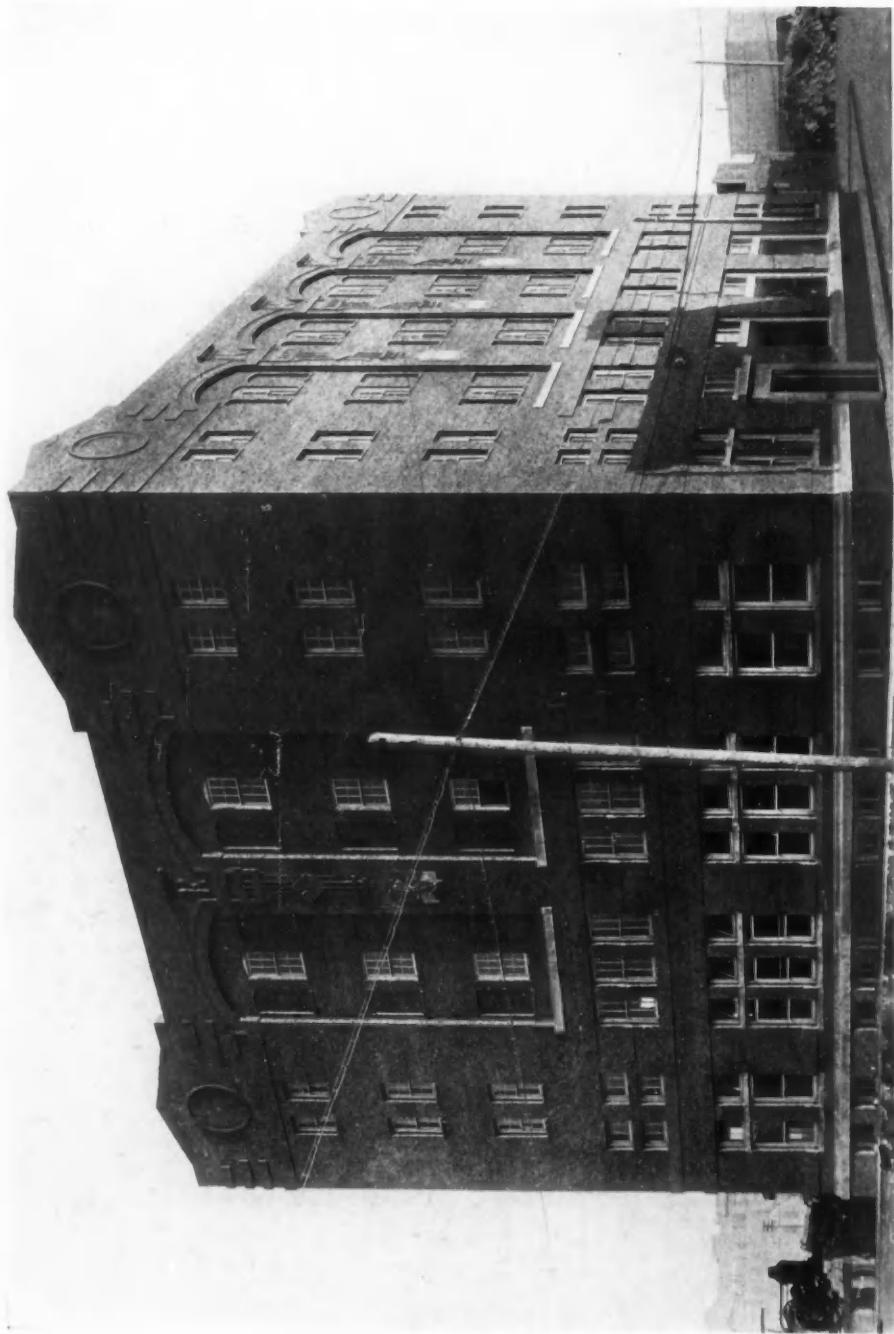


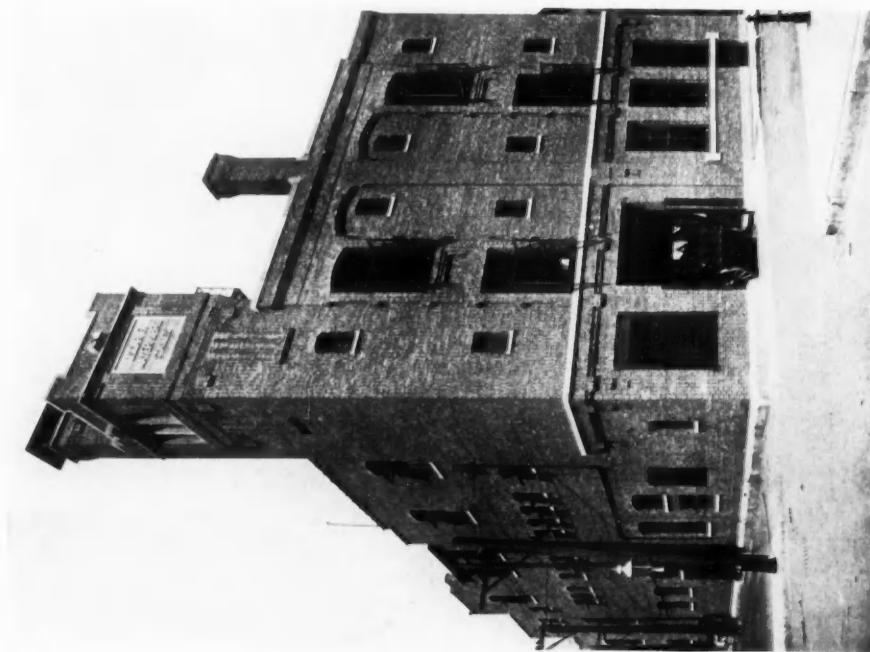
FIRST FLOOR PLAN—RESIDENCE OF CHARLES SHARP, ESQ.,
LOS ANGELES, CAL.
B. Cooper Corbett, Architect.



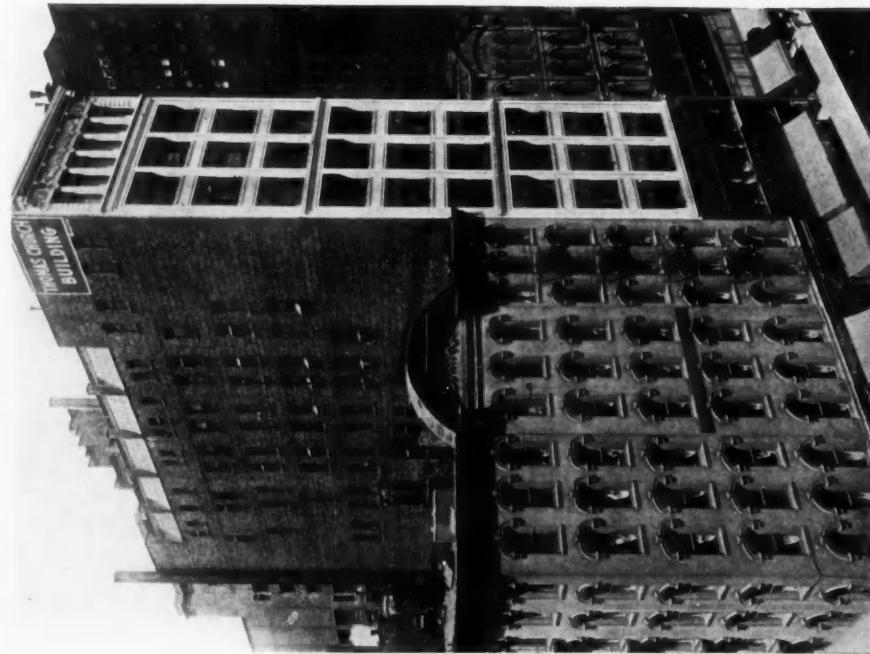
FIRST FLOOR PLAN—RESIDENCE OF C. F. PERRY, ESQ.,
HOLLYWOOD, CAL.
B. Cooper Corbett, Architect.

WAREHOUSE AND BRANCH OFFICE OF THE
RUMELY PRODUCTS COMPANY, SASKATOON,
CANADA. HILL & WOLTERSDORF, ARCHITECTS.





GARAGE AND STABLE OF OSCAR F. MAYER & BROS., CHICAGO.
Hill & Woltersdorf, Architects.



THOMAS CHURCH BUILDING, CHICAGO.
Hill & Woltersdorf, Architects.



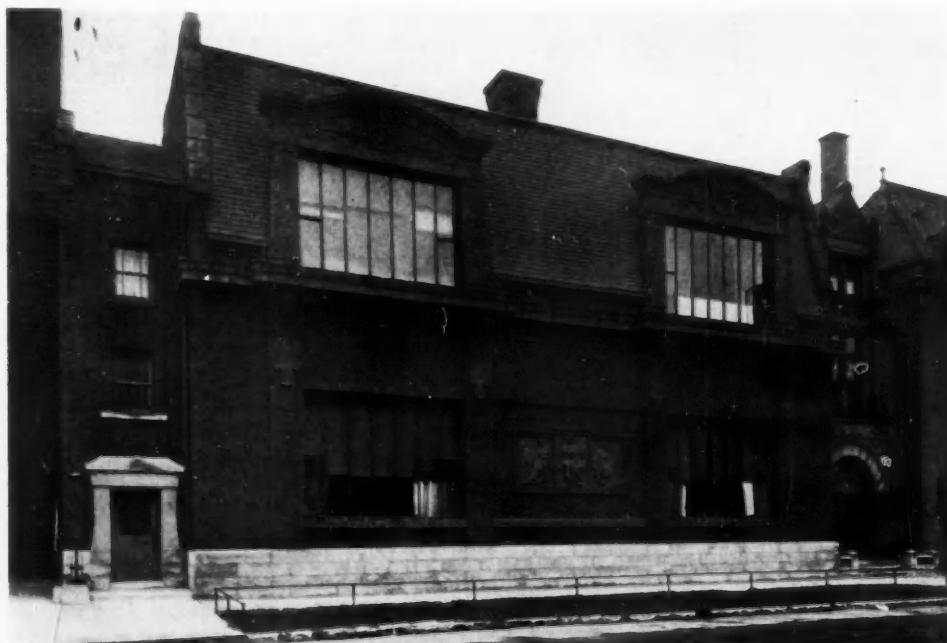
BUILDING OF BURKE & JAMES, CHICAGO.
Hill & Woltersdorf, Architects.



BUILDING OF THE MEYER-BOTH COMPANY, CHICAGO.
Hill & Woltersdorf, Architects.



LABORATORY OF THOS. J. DEE & CO., CHICAGO.
Hill & Woltersdorf, Architects.



ONTARIO STREET ANNEX—TREE STUDIOS, CHICAGO.
Hill & Woltersdorf, Architects.

THE ARCHITECT'S LIBRARY



BOOKS ON MEDIEVAL ARCHITECTURE

By RICHARD FRANZ BACH

Curator, School of Architecture, Columbia University

PART I.

AT a time when the uncertainty of international conflict hovers over many a medieval building, an additional stimulus enlivens our interest in the great formative period that preceded the Renaissance. The writers, responding faithfully to the demand, have produced a number of new works and new translations and editions of recognized works of standard value, which should aid in no small degree in rendering intelligible the architectural significance of the stupendous struggle that has already so extensively laid its toll upon the vestiges of a splendid past in Europe.

Of great interest, though slightly beyond the present troubled area, is the volume by Henry Adams entitled *Mont-Saint-Michel and Chartres* (Houghton, Mifflin Company, Boston and New York, quarto, pp. xiv-401, ill., \$6). Ralph Adams Cram, arch-apostle of things Gothic in this country, writes a brief introduction for the work; not to introduce it necessarily, but in reality to make public apology to the author because his notably meritorious volume—so long hidden from students as a private publication—has only now been given to the

world. Mr. Cram calls this "one of the most distinguished contributions to literature and one of the most valuable adjuncts to the study of medievalism America thus far has produced." Nor has he grossly exaggerated the worth of Mr. Adams' book. It is a readable and flowing series of chapters covering not only Mont Saint Michel, a pioneer in six-part vaulting, and the cathedral of Chartres, a pioneer in the use of the oblong vaulting bay, but also Coutances cathedral and the "Abbaye aux Dames," Queen Matilda's church at Caen. It follows into many channels the developments of stained glass and of apsidal plans, of towers and of portals, not to mention the fine chapters on Abélard, the Miracles of Notre Dame, the story of Nicolette and Marion, and on the three important queens of the Gothic period in France, Eleanor, Mary and Blanche. In these chapters Mr. Adams' ability is at the full, although the genteel manner of the *causerie* runs through the whole volume without at any point lacking the foundation of facts and of architectural understanding. We should wish for other volumes equally flowing in their treat-

ment; the monuments of the Middle Ages, splendidly set in a unified life and reflecting it in a thousand brilliant facets, lend themselves readily to the graceful and subtly informing style of which the author well understands the beauties. Our technical historical discussions are many and accurate, too many of our pages bristle with argument on the fine points of attribution and of origin, but they are on our shelves until needed; they rarely appear on our library tables, and we do not often open their covers unless searching for information immediately required. This volume on Mont Saint Michel, on the other hand, is both technical and attractively written; its place is assuredly within the reach of the architect who is always "too busy to read," chiefly because too many books are written with undisguised purpose "at" instead of "for" the architect. An added recommendation of the work is its publication by authority of the American Institute of Architects, of which body Mr. Adams has recently been made an honorary member "as one who has rendered distinguished services" to architecture.

A book of entirely different character, though attempting a similar vein, is that on *Cathedrals and Cloisters of Northern France*, by Elise Whitlock Rose, with illustrations from original photographs by Vida Hunt Francis. (G. P. Putnam's Sons, New York; two volumes, octavo, pp. xvii-297 and pp. x-345, ill., \$5.) This forms the concluding part of a series of four two-volume works on the cathedrals and cloisters of France, others having covered Midland France, South of France and the Isle of France. All the volumes are profusely illustrated with fresh material—there are no less than two hundred and fifty views in the present set—and for this reason especially useful for the architect and present day traveler; while the text is the compound result of much research and extensive personal contact with the buildings, which have bred an appreciative understanding of medieval architecture and clerical life, fitly conveyed in a brisk, somewhat business-like style. This manner of writing cannot, of course, be con-

sidered a detriment; rather, for a work of this kind, a decided benefit. The area covered by the volumes in hand demands so many illustrations that the text can be but a running comment at best, if the whole story shall be told; yet Miss Rose has been particularly successful in avoiding the guide-book descriptive manner. Long chapters are assigned respectively to Alsace-Lorraine, Champagne, The Nivernais, Maine, Anjou and Laval; of these the first and second are notably well written. Miss Francis' photographs are of exceptional quality and the point of view is essentially that of a trained medievalist. In fact, the authors seem to have struck the happy mean of give and take which makes enjoyable the otherwise diplomatic task of collaboration. The present book, like the other pairs of volumes preceding it in the series, is well bound in attractive covers; the type is large; in general the work will stand a credit to both authors and publishers as a reliable reference book on the diocesan buildings of northern France.

By far the best of the recent works on medieval art in France is the large volume entitled *Religious Art in France; Thirteenth Century; a Study of Medieval Iconography and Its Sources of Inspiration*, by Emile Mâle, translated from the third edition, revised and enlarged, by Dora Nussey. (E. P. Dutton and Company, New York; quarto, pp. xxiv-415, ill., \$6.) This is a masterly treatise with a broad foundation in symbolism and the didactic quality of Gothic art, dealing with medieval Christianity as a fluid, mobile and living thing, and properly collating the art with life, thought and theology to form a splendid Christian unity.

M. Mâle's first words are: "The Middle Ages had a passion for order." A thorough medievalist, his book partakes of the orderliness he lauds. He begins with an analytical chapter entitled "General Characteristics of Medieval Iconography," in which he sets forth that medieval art is characterized notably as a script or sacred writing, as a calculus or sacred mathematics, and as a symbolic code. We have been prone to grant too little importance to the symbolic quality

of Gothic art; a true understanding of this would long since have indicated the single thread of harmony that runs through all things medieval. The unifying current of symbolism permeated the life of the thirteenth century as thoroughly in France, as our so-called "business instinct" dominates the life of the twentieth century in this country.

But it will require more than a simple appreciation of the symbolic element in medieval ornament fully to convey the fact that the designers of the time "organized art as they organized dogma. The artistic representation of sacred subjects was a science governed by fixed laws which could not be broken by the dictates of individual imagination."

In the first place, the art of the Middle Ages developed—as must any art when general education is at a low ebb—a kind of hieratic language which indicated to the *plebs Dei* all that it needed to know of the religion which was life. This sacred script acquired a great complexity but never lost a rigid regularity and sameness of meaning, however the individual forms may have been employed or manipulated. The result was an ecclesiastic grammar, in which the relation of parts was utterly organic and therefore always intelligible when properly used. Misuse of symbols was tantamount to heresy. Each artist had, therefore, to learn an ecclesiastic alphabet of forms, for by the very forms did his record take shape. There is no need in such didactic forms for great depth or beauty in the abstract or aesthetic understanding on which we pride ourselves and which inflicts upon art an aloofness which it never properly possessed nor desired to convey. We spend much time seeking modern beauties in medieval art, projecting temperamental or sentimental significance into motives which speak an obvious language that escapes us because it is so direct and plain spoken. Yet the emotional was not eliminated; that could not be the case at such a time of fervid, often ascetic, Christianity.

But apart from the symbolism of use which dictated bare feet here and aureole there, we must give importance also to position, grouping, symmetry and num-

ber in medieval iconography; for by virtue of its observance of these qualities the emblematic story of the Middle Ages developed a sort of sacred mathematics, subject to formulae scientifically as rigorous. In this connection must be noted the orientation of buildings, the relative positions of symbols, the comparative significance of different parts of churches, the interrelation of figures in religious history being closely paralleled in their carved, painted or stained glass counterparts. Thus the more gloomy northern transept arm, for instance, was decorated with motives from the Old Testament, the warmer southern transept with those chosen from the New Testament. The symmetry which signified inner harmony appears in the balancing of the twelve ancient patriarchs or the twelve prophets against the twelve Apostles of Christ; and in the same fashion other groups were disposed according to a sort of biblical equation. The Virtues and Liberal Arts, in equal numbers, are similarly balanced, e. g., in opposite windows or in opposite or parallel recessed doorways. The meaning of numbers in this connection may be better understood by an actual passage from M. Mâle referring, by way of example, to the ritualistic interpretations of the numbers twelve and seven: "Twelve is the number of the universal Church, and it was for profound reasons that Jesus willed the number of His apostles should be twelve. Now twelve is the product of three by four. Three, which is the number of the Trinity and by consequence of the soul made in the image of the Trinity, connotes all spiritual things. Four, the number of the elements, is the symbol of material things—the body and the world—which result from combinations of the four elements. To multiply three by four is in the mystic sense to infuse matter with spirit, to proclaim the truths of the faith to the world, to establish the universal Church of which the apostles are the symbol." The computation involving the number seven is yet more ingenious; it reaches a real grandeur. "The number seven, regarded by the Fathers as mysterious above all others, intoxicated the medieval mystic. It was ob-

served first of all that seven—composed of four, the number of the body, and of three, the number of the soul—is pre-eminently the number of humanity, and expresses the union of man's double nature. All that relates to him is ordered in series of sevens. Human life is divided into seven ages with each of which is associated the practice of one of the seven virtues. The grace necessary for the practice of these seven virtues is gained by addressing to God the seven petitions of the Paternoster. The seven sacraments sustain man in the exercise of the seven virtues, and guard him from falling into the seven deadly sins. The number seven thus expresses the harmony of man's nature, but it also expresses the harmonious relation of man to the universe. The seven planets govern human destiny, for each of the seven ages is under the influence of one of them." On this point witness the carvings of the seven ages of man on the capitals of the Doge's Palace at Venice and the frescoes of the Chapel of the Eremitani at Padua; the tradition is undoubtedly to be led back to classical times. "Thus seven invisible threads connect man with the scheme of the universe. Now the beautiful symphony made by man and the world will last for seven periods of time . . . of which six have already passed. By creating the world in seven days God gave man the key to these mysteries, and the Church celebrates the sublimity of the Creator's plan when she sings His praises seven times a day."

Finally we have the manifestation of medieval art as a symbolic code, on the basis of which definite ideas are given a figurative expression, and therewith a quickening spirit. It is an art of intentions, as well as of actualities. Thus the four rivers of Paradise are not only what they seem pictorially, but represent also the four Evangelists pouring their beneficent doctrine in a flood over the world. The liturgy itself contains a myriad of hidden meanings, and each stage of the mass is a step in the unfolding of the great story of life, death and salvation. Thus the long neglected works of the medieval liturgiologists must be exalted

to a new dignity, equal to that accorded to splendid figures like Hugh of St. Victor, Rhabanus Maurus, Gulielmus Durandus, Thomas Aquinas and Vincent of Beauvais himself. In the same fashion we might follow this figurative expression in its multiple applications in clerical vestments, in illuminated manuscripts or in portable church utensils. Nor is it fair to consider the extent and intricacy of this symbolic system the result of a play of fancy, devising by devious means far fetched connotations or befuddling numerical puzzles. The fervor of the medieval Christian is not to be denied, and whatever his failings as zealot and devotee, he was a good churchman, the sole teacher of the people, and in that sense at least thoroughly religious. In his ecclesiastic art we can therefore expect a sincerity and uniformity of purpose and in his all embracing symbolism an amplification of the only ready means of access to the minds of the masses for the truth they so much needed.

The main body of M. Mâle's book carries out the threefold interpretation promised in the introduction, and the author arranges his task in accordance with the subdivision laid down by Vincent of Beauvais, the *librorum helluo* or devourer of books, the most comprehensive thinker of the Middle Ages, in his *Mirror*. This was one of a large number of works, called variously *speculum*, *summa*, or *imago mundi*, in the encyclopedic thirteenth century. Believing thoroughly in the fitness of things, M. Mâle has chosen the *Speculum Majus* of Vincent of Beauvais as a model, for, says he, we may not without danger of error project our modern categories into the work of the Middles Ages and expect the latter to order itself according to an alien mode of classification and thought. Vincent adopts "the very plan of God as it appears in the Scriptures" and divides his stupendous work into four major parts, each called a Mirror, as follows: the Mirror of Nature, the Mirror of Instruction, the Mirror of Morals, and the Mirror of History. The four Mirrors are logically connected, more or less as a cumulative develop-

ment. We begin with Nature and the truth of Creation, culminating in the sixth day's achievement and the appearance of man upon earth. The Mirror of Instruction recites the eternal question or "riddle of the universe;" it treats of the fall of man, and his endeavor to rise again—through knowledge which gives power—by beginning the work of his redemption with the labor of his hands in the mechanical arts. Since the end of life is not only "to know but to act," since knowledge is the key to virtue, we are led naturally to the Mirror of Morals, wherein the virtues and vices are carefully classified. Having thus analyzed and laid bare the substance of man, it behooves us to note his ability in shifting for himself, in unwinding the course of his life under the unseen guidance of God; this is the Mirror of History. To Vincent, the Churchman, the only true history is of course the history of the universal or Catholic Church. Pagan life has a mere synchronic value, incidental to the brilliant course of Catholicism with its eminently coherent sequence of Old and New Testament saints.

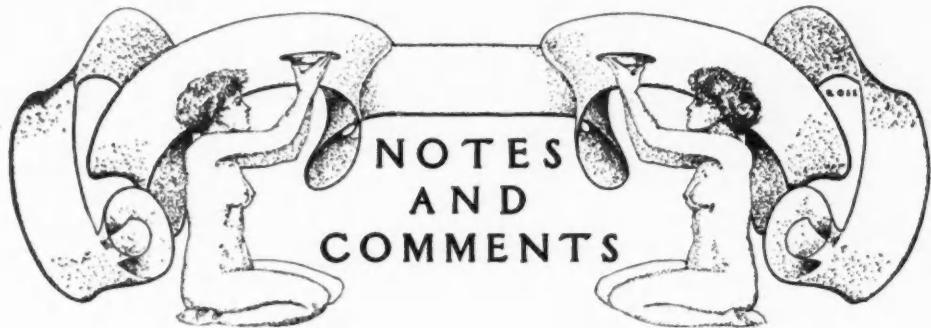
In this quartet of *Mirrors* Vincent of Beauvais gathered together the sum and substance of the Middle Ages, an eternal pandect or synopsis. No less fundamental a transformation than the Renaissance itself was necessary to add to its information. It portrays vividly the leading conceptions that inspired thirteenth century art; "the same genius disposed the chapters of the *Mirror* and the sculpture of the Cathedral. It is legitimate to seek in one the meaning of the other."

M. Mâle's system then is that of Vincent of Beauvais throughout, and his thoroughness not a jot less. He runs the gamut of sculpture and stained glass, of capitals and corbels, of floral motives and monsters, of lunettes and lintel bands of painted walls, pinnacle and carved portals. He cites chapter and verse for every assertion with a methodical directness that is little short of perfect in its

command of literary as well as monumental sources. The porches of Chartres live again and we find its figures moving to a sort of churchly music of the spheres which permeates the Middle Ages and imparts to them a oneness that brooked but few exceptions. We travel from Laon to Amiens, from Bourges to Poitiers, and the truths are always the same; solid homogeneity and order demand that the same story be taught in the same way throughout Christendom.

M. Mâle is a medievalist second to none, and his sincerity strikes a quick note of accord in the reader. But he is not a preacher for the modern. That is not his chosen province; he simply takes the fine Gothic time when the flower is full blown and unfolds its hidden beauties to eyes that had thought to see all its truths, but that soon appreciate the shallowness of usual study and begin to sound a new depth. He does not point Gothic lessons for the present; nor does he advocate the resurrection of an artistic mode of speech hopelessly beyond reach. He attempts only to indicate the manly conviction and ingrained faith which dominated one of the golden ages of art.

The book is somewhat heavy, but the number of illustrations—there are one hundred and ninety—is largely responsible for that. The "make-up" of the volume deserves particular mention. The many necessary references are gathered in easily legible footnotes, so that frequent place names may not clutter the text. There is an appendix giving a list of the chief works devoted to the life of Christ, appearing in the churches of the end of the twelfth, the thirteenth and the fourteenth centuries. Finally there is also an exhaustive bibliography, an index of works of art classified by character or subject, location and building. We are glad to congratulate both M. Mâle and the E. P. Dutton Company upon an authoritative publication, thoroughly successful in every particular.



**A Seashore
Cottage at
Nantucket.**

Nantucket, herewith illustrated, is one of the most attractive that has recently come to our attention. It is the property of Miss Alice M. Corse, and was planned by her brother, Mr. Henry T. Corse, Jr., of New York.

The house faces directly on the ocean, with its back to the road. The entrance, from the rear, leads to a small stair hall, and thence to the main living-room, with an alcove giving directly on the beach. Adjacent is a porch of comfortable size, and back of this the dining-room. The service is located in the wing toward the road, on the right of the entrance. Upstairs are four master's bed-rooms, maid's room and bath.

In a construction of this size, elaborate architecture would be out of place, and Mr. Corse, very properly, has treated the building with the greatest possible simplicity. The entire house is shingled; the porch columns are simple, square wooden posts;



HOUSE OF MISS ALICE M. CORSE,
NANTUCKET, MASS.

Henry T. Corse, Jr., Architect.

the chimneys are of the plainest description. Interest is given, however, by the effective grouping of the windows and their subdivision, and by the unusual lines of the roof. On the main front the roof has been carried down in a long slope over the porch, with the three domes to add variety to its surface, while the hip on the sides is cut off so as to give a vertical wall up to the tops of the second story windows. On the rear the same scheme is logically carried out, the symmetry of the sides determining the treatment of each portion of the roof. The only questionable feature is

the gable over the stairs, as it seems that a hip roof at this point might have composed more harmoniously with the general arrangement. But the design as it exists is good enough to be cause for self-congratulation both to the architect and to the casual visitor.

In view of its undoubtedly architectural merit, the low cost of this house is quite remarkable. Those who consider an architect as an expensive and unnecessary luxury

may be interested in knowing that the total cost, including the land, was less than five thousand dollars. Even the omission of a cellar, according to the local custom, makes this economy none the less noteworthy.

**A Bank,
Monumental
and
Beautiful.**

The Continental American Bank, the latest of the great buildings erected in Chicago by the office of the late Daniel H. Burnham, is a tremendous production. It occupies an entire block, approximately 600 feet in length by 200 feet in width, and it is twenty-five stories in height. The exterior is massive in scale and simple in composition. The detail is not of special interest aside from the great colonnade of red granite columns which extends the entire length of the basement and first story on the principal front. Above the basement and first story the building is built in a hollow square which permits of the first story being lighted by a vast skylight, many thousands of square feet in area. It is this first story which is the most interesting and successful feature of the great building. It is occupied by the important banking institution which gives the building its name. The dimensions of this first story are so tremendous and the scale which has been employed in its architectural treatment so immense that although the height of the basement is sufficient to afford a story of sufficient height to provide quarters for another great bank, the stairs which lead at each end of the block from the entrance and elevator lobby to the main banking floor seem absolutely inconsiderable and give one the feeling of being not more than three or four risers in height. The floor of the banking room itself is that of a great Grecian temple, with triple rows of columns down each side. The bank screens have all been placed behind the second row of columns and their material and detail as well as that of all the other features of the room have been kept low in tone and are beautiful and well studied in detail.

**A Layman
on
Builders
and
Planning.**

This many a day we have waited for the small but effective voice out of the wilderness that would indicate the opinion of the world as to the case of architect versus builder. To most

of us the idea of competition between these gentlemen is ridiculous, yet the stern reality is forced upon us as soon as we leave the cities and observe the activity of builders in communities smaller. In such impor-

tant matters we sometimes hear the keynote struck in the enemy's camp, as it were, and for that reason we are not greatly surprised to come upon the following, which is an excerpt from the letter of a correspondent of the Christian World: "The worst is that there are duffers in the architectural profession. An architect wants choosing. But the right kind of architect is a man who is very seldom overpaid for his work." What truths are these! The duffers we are anxious to ostracise after the manner of the ancient Greeks, for it is they who render the choosing necessary. But, architecturally, the word overpaid does not exist. "He . . . ensures that . . . the builder does precisely what he has engaged to do . . . and . . . as a usual thing the architect is able to produce, in co-operation with the builder, a much more attrac-



HOUSE OF MISS ALICE M. CORSE,
NANTUCKET, MASS.

Henry T. Corse, Jr., Architect.

tive house than the builder would have produced on his own account. After all, the work of the builder is building, not planning." And this last sentence the editorial writer of *The Builder* calls the Kimberley diamond found in the blue clay, and he adds with relish: ". . . When the average man discovers that the work of the builder is building, not planning, the architects may make a joyful sound and put crowns upon their heads."